COUNTY NOTICES PURSUANT TO A.R.S. § 49-112

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NOTICE OF FINAL RULEMAKING

MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS

RULE 314 – OPEN OUTDOOR FIRES

[M05-109]

PREAMBLE

1. Sections affected **Rulemaking Action**

Rule 314 Amend

2. The statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing Statutes: Arizona Revised Statutes (A.R.S.) §49-112, §49-479, and §49-501.

Implementing Statute: Arizona Revised Statutes (A.R.S.) §49-479.

3. The effective date of the rule:

April 20, 2005

4. A list of all previous notices appearing in the Register addressing the rule:

Notice Of Rulemaking Docket Opening: Arizona Administrative Register (A.R.S.)

Volume #10, Issue #23, June 4, 2004.

Notice of Proposed Rulemaking Arizona Administrative Register (A.R.S.)

Volume #10, Issue #35, August 27, 2004.

5. Name and address of department personnel with whom persons may communicate regarding the rulemaking:

Name: Patricia P. Nelson or Jo Crumbaker, Air Quality Division

Address: 1001 N. Central Ave. Suite 695, Phoenix, Arizona 85012

Telephone: (602) 506-6709 or (602) 506-6705

Fax: (602) 506- 6179

E-Mail: pnelson@mail.maricopa.gov or jcrumbak@mail.maricopa.gov

6. An explanation of the rule, including the department's reasons for initiating the rule:

The rule amends Maricopa County's existing open burning rule to make it conform to EPA's requirements for the state of Arizona's Regional Haze State Implementation Plan (SIP). The Arizona Department of Environmental Quality's final rule, which amended Arizona's existing open burning and prescribed burning rules to conform to Regional Haze SIP requirements, was effective March 16, 2004. Any revisions to Maricopa County's existing open burning rule must also continue to implement Best Available Control Measures (BACM) as required by the Clean Air Act for serious PM-10 nonattainment areas.

The major revisions to the rule add recordkeeping requirements. The revisions also include technical changes to improve the rule's clarity. The rule includes new definitions such as orchard heaters and emission reduction techniques and also expands on some other selected definitions for clarity.

7. A reference to any study relevant to the rule that the department reviewed and either relied on in its evaluation of or justification for the rule or did not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

No studies were used.

8. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:
Not applicable.

9. The summary of the economic, small business, and consumer impact:
Maricopa County Environmental Services Department (MCESD) expects the rule to create minimal actual economic impact on the regulated communities and the County, such as the costs associated with recordkeeping, documentation, and reporting requirements. No comments were received concerning the economic analysis.

10. A description of the changes between the proposed rule, including supplemental notices, and final rule (if applicable):
No changes were made.

11. A summary of the comments made regarding the rule and the agency response to them:
No comments were received.

12. Any other matters prescribed by statute that are applicable to the specific department or to any specific rule or class of rules:
Not applicable.

13. Incorporations by reference and their location in the rule:
There are no incorporations by reference in the rule.

14. The full text of the rule follows:

REGULATION III - CONTROL OF AIR CONTAMINANTS

RULE 314
OPEN OUTDOOR FIRES

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AIR CURTAIN DESTRUCTOR AND BURN PIT PROCEDURES

Revised 07/13/88
Revised 12/19/01

MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS
REGULATION III - CONTROL OF AIR CONTAMINANTS

RULE 314

OPEN OUTDOOR FIRES

SECTION 100 - GENERAL

101 PURPOSE: To limit the emissions of air contaminants produced from open burning.

102 APPLICABILITY: Rule 314 is applicable to any open outdoor fire that is conducted within Maricopa County.

SECTION 200 - DEFINITIONS: See Rule 100(General Provisions and Definitions) of these rules for definitions of terms that are used but not specifically defined in this rule. For the purpose of this rule, the following definitions shall apply:

201 AIR CURTAIN DESTRUCTOR - A device designed to form a curtain of air over a pit in which combustion occurs that aids in more complete combustion through increases in turbulence and combustion time.

202 DANGEROUS MATERIAL - Any substance or combination of substances that is capable of causing bodily harm or property loss unless neutralized, consumed, or otherwise disposed of in a controlled and safe manner.

203 DITCHBANK – A lateral area not to exceed two and one half feet on either side of a ditch.

204 ~~FENCE ROW -~~ ~~A lateral area not to exceed two and one half feet on either side of the centerline of a fence.~~ **EMISSION REDUCTION TECHNIQUES (ERTS) –** Methods for controlling emissions from outdoor fires to minimize the amount of emissions output per unit of area burned. Types of ERTS include minimizing the material to be burned, preventing fire from spreading by lining the area and applying fire retardant foam or water, allowing the material to dry before burning, extinguishing the smoldering burns, burning in piles, burning in the opposite direction of the wind, using a back fire when grass is burned, burning before litter falls and burning prior to precipitation.

205 ~~OPEN OUTDOOR FIRE -~~ ~~Any combustion of any type of material outdoors, where the products of combustion are not directed through a flue~~. **FENCE ROW -** A lateral area not to exceed two and one half feet on either side of the centerline of a fence.

206 ~~**PUBLIC OFFICER –** Any elected or appointed officer of a public agency established by charter, ordinance, resolution, state constitution or statute, but excluding member of the legislature~~. **FLUE** - Any duct or passage for air or combustion gases, such as a stack or chimney.

207 ~~**RESTRICTED-BURN PERIOD –** A condition declared by the Control Officer whenever meteorological conditions are conducive to an accumulation of carbon monoxide (CO) and/or particulate matter in exceedance of the standards or when air quality reaches other limits established by the Control Officer~~. **OPEN OUTDOOR FIRE OR OPEN BURNING** - Any combustion of any type of material outdoors, where the products of combustion are not directed through a flue. Open outdoor fires include agricultural, residential, prescribed and construction burning. Purposes for fires can include prevention of a fire hazard, instruction in the methods of fighting fires, watershed rehabilitation, disease and pest prevention.

208 **ORCHARD HEATERS –** A device which helps prevent frost damage to fruit trees by heating. An orchard heater consists of a pipeline heater system operated from a central control from which fuel is distributed by a piping system from a centrally located tank.

209 **PUBLIC OFFICER –** Any elected or appointed officer of a public agency established by charter, ordinance, resolution, state constitution or statute, but excluding ~~member~~ members of the legislature.

210 **RESTRICTED-BURN PERIOD –** A condition declared by the Control Officer whenever meteorological conditions are conducive to an accumulation of carbon monoxide (CO) and/or particulate matter in exceedance of the standards or when air quality reaches other limits established by the Control Officer.

SECTION 300 - STANDARDS

301 **PROHIBITION - OPEN OUTDOOR FIRES:** It shall be unlawful for any person to ignite, cause or permit to be ignited, allow, maintain any open outdoor fire within the limits of Maricopa County, except as provided in Section 302 of this rule and in Section 303 of this rule.

302 **BURN PERMIT:** A person shall first obtain a Burn Permit from the Control Officer before igniting, causing or permitting to be ignited, allowing, or maintaining the open outdoor fires described in ~~subsections~~ Sections 302.1 through 302.8 of this rule. Before a person to whom a Burn Permit has been issued begins burning, such person shall call, for permission to burn, the fire department having jurisdiction and the Control Officer, who must base his decision to approve or deny permission to burn on National Weather Service forecasts or other meteorological analyses. If a person has obtained a Title V Permit, a Non-Title V Permit, or a General Permit under Regulation II (Permits And Fees) of these rules that includes condition(s) regarding open outdoor fires, then such person shall not be required to obtain a Burn Permit from the Control Officer. See Section 402 of this rule for requirements regarding Burn Permit applications and see Section 403 of this rule for requirements regarding Burn Permit conditions.

302.1 Open outdoor fires that are declared necessary by the County Agricultural Agent, when such fires have been determined as essential for the purposes of disease and/or pest prevention and certified by actual investigations by the County Agricultural Agent.

302.2 Open outdoor fires for the control of weeds for the prevention of fire hazards, when such fires are declared necessary by a public officer in the performance of his official duties.

302.3 Open outdoor fires for fire fighting training. See ~~subsection~~ Section 303.10 of this rule for an exemption to this requirement.

302.4 Open outdoor fires for the burning of agricultural ditchbanks and fence rows where other reasonable mechanical, chemical, or other methods of removal are not available.

a. A high temperature mechanical burner must be used to burn ditchbanks, canal laterals, and/or fence rows.

b. Burning ditchbanks and/or fence rows is not allowed during a restricted-burn period from October 1 through February 29, unless such fires are required in the performance of an official duty of any public office, or such fires are necessary to thwart or prevent a hazard that cannot be properly managed by any other means, or are necessary for the protection of public health.

c. An on-site inspection must be conducted to verify that only ~~agricultural~~ vegetative materials will be burned.

d. After an initial on-site inspection has been completed, a Burn Permit may be issued for the same location(s) without having to conduct additional initial on-site inspections. However, periodic, unscheduled, on-site inspections may be conducted on days when such burning has been authorized by the Burn Permit.

302.5 Open outdoor fires for the destruction of tumbleweeds in cases where other reasonable methods are not available.

a. Tumbleweeds must be cut, piled, and dried before burning.

b. A high temperature mechanical burner may be used to burn un-dried tumbleweeds in situations where it is not feasible to allow natural drying.

c. A high temperature mechanical burner must be used to burn tumbleweeds growing along canal laterals and fence rows.

302.6 Open outdoor fires for the burning of indigenous scrub vegetation cleared for the purpose of construction or agricultural operations in non-urban areas of low population where other reasonable methods are not available.

a. The Control Officer shall issue such Burn Permit only once per geographical location.

b. An air curtain destructor must be used (see Appendix To Rule 314) for the burning of certain vegetative materials greater than 6 inches in diameter and an on-site inspection must be conducted before burning.

c. An on-site inspection must be conducted to determine removal of all other materials (e.g. wood, rubber, and metal) before the issuance of the Burn Permit.

302.7 Open outdoor fires using an air curtain destructor for the burning of certain material, including but not limited to citrus trees or other types of vegetation. Air curtain destructors shall not be operated closer than 500 feet from the nearest dwelling. See Appendix To Rule 314 for procedures for air curtain destructors and burn pits.

302.8 Open outdoor fires declared necessary by the Federal government or any of its departments, agencies, or agents, or the state or any of its agencies, departments, or subdivisions for the purpose of watershed rehabilitation or control through vegetative manipulation.

303 EXEMPTIONS: A person shall not be required to obtain a Burn Permit in order to conduct open outdoor fires described in ~~subsections~~ Sections 303.1 through ~~303.10~~ 303.11 of this rule.

303.1 Domestic cooking for immediate human consumption.

303.2 Warmth for human beings.

303.3 Recreational purposes, where the combustible material is clean, dry wood, or charcoal.

303.4 Branding animals.

303.5 Orchard heaters for frost protection in farming or nursery operations.

303.6 Disposal of dangerous material.

a. Disposal of dangerous material must be conducted in compliance with the Department of Environmental Quality's (ADEQ's) regulations.

b. Before a person conducts an open outdoor fire to dispose of dangerous material, such person shall call the Control Officer to determine if a restricted-burn period has been declared and obtain permission to burn.

303.7 Fire extinguisher training. This exemption applies only when the training is limited to using a small amount of flammable liquid and a small container (i.e., a wastepaper basket or a flat pan).

303.8 Testing potentially explosive-containing, flammable, or combustible products (e.g., automotive airbags, rocket motors, gas generators, and vehicular assemblies) in accordance with Department of Transportation (DOT) or Department of Defense guidelines.

a. This exemption refers to testing of hazard classification, packaging performance, propagation, and/or mass fire, but only when testing area is controlled, is relatively small, and when testing is not considered to be nor is associated with the disposal of dangerous material.

b. Before a person conducts an open outdoor fire for testing potentially explosive-containing, flammable, or combustible products for hazard classification, packaging performance, propagation, and/or mass fire, such person shall call the Control Officer to determine if a restricted-burn period has been declared and obtain permission to burn**.**

303.9 Testing potentially explosive-containing products for commercial, military, and law enforcement uses.

a. This exemption applies only when the testing is controlled, is relatively small, and is not considered to be nor is associated with the disposal of dangerous material.

b. Before a person conducts an open outdoor fire for testing potentially explosive-containing products for commercial, military, and law enforcement uses, such person shall call the Control Officer to determine if a restricted-burn period has been declared and obtain permission to burn.

303.10 Fire fighting training areas and training structures.

a. This exemption applies only if the sole source of flame is a burner fueled by either liquefied petroleum gas or natural gas, with a British Thermal Unit (BTU) input per hour rating of less than 2,000,000 BTUs.

b. Before a person conducts an open outdoor fire for fire fighting training areas and training structures, such person shall call the Control Officer to determine if a restricted-burn period has been declared and obtain permission to burn.

303.11 Proper disposal of flags under 4 United States Code 8.

SECTION 400 - ADMINISTRATIVE REQUIREMENTS

401 **FEES REQUIRED:** A fee shall be charged for a Burn Permit as set forth in Rule 280 (Fees) of these rules.

402 **BURN PERMIT APPLICATION:** A person shall file with the Control Officer, on a form prescribed by the Control Officer, a Burn Permit application and the complete application fee as described in Rule 280 (Fees) of these rules. The Control Officer shall act on a Burn Permit application and shall notify the applicant within 14 calendar days of the filing of the completed application.

402.1 A separate Burn Permit application is required for each burn site location not contiguous to the location on the original Burn Permit application.

402.2 The Control Officer shall conduct an on-site inspection before issuing the Burn Permit.

402.3 The issuance of a Burn Permit does not relieve the permittee from any of the requirements of a fire department having jurisdiction, including but not limited to having the Burn Permit validated by such fire department.

402.4 Maricopa County shall not issue permits for its own burning activities. Authority for issuance of permits to the County shall be retained by Arizona Department of Environmental Quality.

403 **BURN PERMIT CONDITIONS:** The Control Officer may impose any permit conditions that are necessary to ensure compliance with Federal laws, State laws, or these rules. Burn Permit condition(s) may include, but are not limited to, burning hours, notification of intent to burn, and Burn Permit posting.

404 **BURN PERMIT DENIAL:** The Control Officer shall deny a Burn Permit application if the material or operations do not meet the criteria described in this rule.

405 **BURN PERMIT ~~TERM~~ TERMS:** A Burn Permit shall be issued for the following terms:

Air Curtain Destructor	30 days from date of issuance
Disease/Pest Prevention	30 days from date of issuance
Fire Hazard	30 days from date of issuance
Land Clearance	30 days from date of issuance
Tumbleweeds	30 days from date of issuance
Ditchbank/Fence Row	1 year from date of issuance
Fire Fighting Training/Structures	1 year from date of issuance

500 MONITORING AND RECORDS ~~(NOT APPLICABLE)~~

501 RECORDKEEPING AND REPORTING:

402.1 The following information shall be provided to the Control Officer for each time that open burning occurs for persons and operations subject to Sections 302, 303.6, 303.8, 303.9, and 303.10. This information shall be provided on a daily basis either by writing, fax, or electronically and shall include:

a. The date of the burn; and

b. The type and quantity of fuel burned for each date open outdoor burning occurs; and

c. The fire type such as a pile or windrow for each date that open outdoor burning occurs; and

d. The legal location, to the nearest township, range and section, or latitude and longitude, to the nearest degree minute; street address; or parcel number.

502 RECORDS RETENTION:

502.1 Maricopa County shall retain permits issued for open burning available for inspection by the Arizona Department of Environmental Quality (ADEQ) for five years.

502.2 For each permit issued, Maricopa County shall have a means of contacting the person authorized by the permit to set an open fire, if an order to extinguish open burning is issued by either the County or ADEQ. Therefore the permit application must contain the name of a contact person and shall list a means of contacting that person.

502.3 Maricopa County shall hold or attend an annual public meeting for interested parties to review operations of the open outdoor fire program and discuss emission reduction techniques.

502.4 Maricopa County shall annually submit to ADEQ a record of daily burn activity by May 15 of each calendar year.

APPENDIX TO RULE 314

AIR CURTAIN DESTRUCTOR AND BURN PIT PROCEDURES

A. Burn Pit Requirements

The following must be complied with prior to approval of a pit for burning purposes:

1. The pit must not exceed the length of the plenum.
2. The width of the pit must not exceed 8 feet.
3. The depth of the pit must be a minimum of 15 feet.
4. The maximum erosion width must not exceed 12 feet nor must the pit result in excessive emissions at any time due to erosion, regardless of the width.
5. The pit must have 4 stable, vertical sides such as, but not limited to, mineral, soil, metal curtain, and masonry.
6. When pit locations are changed, an inspection of the newly located pit must be made by the field inspector prior to burning.

B. Equipment Set-Up

The equipment must be positioned so as to allow the blower's airflow to strike at a downward angle no less than 24 inches below the opposite rim of the pit.

C. Operation Of Blower

1. The proper blower speed must be maintained so as to meet emissions standards.
2. The blower must be operating when and as long as any material in the pit is burning.

D. Loading Of The Pit

1. When loading (feeding) the pit, the material must not extend above the air curtain (blower airflow).

2. The loading of materials into the pit must be discontinued at a minimum of 2 hours prior to the end of the designated burning hours. The blower must continue to operate until the end of the burning hours or until combustion is completed.
3. Adequate measures must be taken to assure that no emissions emanate from materials left in the pit (i.e., overnight). All materials left in the pit must be extinguished with water or covered over with a minimum of 1 foot of mineral soil.

E. Pit Clean-Out

All materials removed from the pit must be completely extinguished and all reasonable precautions taken to control emissions.

F. Permit Approval Requirements

Prior to any Burn Permit approval, a visual on-site inspection of the pit, the material, and the equipment (operational) must be conducted. Any unauthorized material must be removed prior to approval.

G. Burning Hours

The following burning hours apply:

April - September 6 am – 6 pm

October - March 8 am – 5 pm

While complying with the above schedule, the permittee must also obtain permission from the Control Officer on each day of burning. Burning is not authorized on weekends nor on holidays. Rubber and plastic type material must not be used as ignition fuel.

NOTICE OF FINAL RULEMAKING

MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS

RULE 358 – POLYSTYRENE FOAM OPERATIONS

[M05-110]

PREAMBLE

1. Sections affected: **Rulemaking action:**
Rule 358 New Rule

2. The statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rule is implementing:

Authorizing statutes: Arizona Revised Statutes, Title 49, Chapter 3, Article 3, Sections 479 and 480 (A.R.S. § 49-479, A.R.S. § 49-479)

Implementing Statute: Arizona Revised Statutes, Title 49, Chapter 1, Article 1, Section 112 (A.R.S. § 49-112)

3. The effective date of the rule:
April 20, 2005

4. A list of all previous notices appearing in the Register addressing the final rule:

Notice of Rulemaking Docket Opening, Arizona Administrative Register,
Volume #9, Issue #33, p. 3677, August 15, 2003.

Notice of Proposed Rulemaking, Arizona Administrative Register,
Volume # 9, Issue # 45, November 7, 2003.

Oral Proceeding, held December 11, 2003 and noticed in Arizona Administrative Register,
Volume # 9, Issue # 45, November 7, 2003.

Notice of Termination of Rulemaking, Arizona Administrative Register,

Volume # 11, Issue #7, February 11, 2005.

Notice of Rulemaking Docket Opening, Arizona Administrative Register,

Volume # 11, Issue #3, January 14, 2005.

Notice of Proposed Rulemaking Arizona Administrative Register,

Volume # 11, Issue #7, February 11, 2005.

Oral Proceeding, held March 17, 2005, and noticed in Arizona Administrative Register,

Volume #11, Issue #7, February 11, 2005.

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name:	Rick Kramer-Howe or Jo Crumbaker
Address:	1001 North Central Avenue #695, Phoenix, Arizona 85004
Telephone:	602-506-6706 or 602-506-6705
Fax:	602-506-6179
E-mail:	rkramer@mail.maricopa.gov or jcrumbak@mail.maricopa.gov

6. Explanation of the rule, including the department's reasons for initiating the rule:

Historically the Maricopa County Rules and Regulations have not contained a source-specific rule to address pollutants from polystyrene foam operations. New Rule 358 addresses volatile organic compound (VOC) emissions that are emitted from the manufacture of expanded-polystyrene (EPS) foam products. Section 182 (a)(2)(A) of the Clean Air Act requires that Reasonable Available Control Technology (RACT) be applied in ozone nonattainment areas to each stationary facility that is a *major source* of VOC emissions. Maricopa County contains an ozone nonattainment area classified as "serious". Maricopa County has identified four facilities that expand polystyrene (EPS) to make foam products, each of which have uncontrolled VOC emissions that exceed the major source threshold of 50 tons per year. New Rule 358 incorporates reasonably available control technology. It is estimated that VOC emissions from the EPS foam industry will be reduced by 175 - 200 tons per year from 2001 levels due to new Rule 358.

The Basic Process: Regardless of what category of molded foam products an EPS foam facility specializes in, the basic processing steps are the same. The raw material is tiny plastic (polystyrene) beads that are made with liquid pentane incorporated within them. In a typical workday, several billion of these beads are heated by steam until the expanding pentane vaporizes, puffing up each bead from 10 to 50 times its original volume. The resulting "puff" globules are then cured by simply aging them in large containers exposed to air. Aging allows the hot plastic to cool and set, the steam-water to evaporate, and the pressure within each puff globule to equalize with atmospheric pressure. Aging also allows the EPS facility to regulate the amount of VOC that is in the puff in order to control the molding process.

Molding is the final processing operation necessary to produce a molded EPS product. In molding, the aged puff is first conveyed or blown into a mold. If all the curing goals have been accomplished and the VOC is in the proper range, when the mold is closed, pressure and heat applied for the programmed time, and then the mold finally opened, the finished product neither develops fissures and swellings from too much pentane nor does it crumble because there was not enough pentane to fuse all the puff particles together.

Of the four facilities affected by the emission standards of Rule 358, three are block-makers and one is a cup-maker.

Block makers' molds are typically 16 to 24 feet long and have a width and depth of 2 1/4 to 4 feet. The large foam blocks that emerge from these molds are typically cut into insulation boards and flat architectural shapes. The cup-maker has as many as 40 different types of molds and up to a few dozens of each mold-type to make everything from small coffee cups to soup bowls to large 44 oz. tumblers, depending on customer needs. Shape molding typically produces custom parts and custom packaging designed to exactly fit and surround an item to be shipped.

Each facility must both limit the amount of VOC that escapes to the atmosphere in the course of making the foam products and limit the amount of VOC left in the freshly molded product. The patterns of VOC emission from molded EPS products vary. Prior to any restrictions, up to 60% of the pentane in the raw EPS beads might be retained in freshly made blocks and cups. Pentane is a flammable liquid dissolved within the raw polystyrene EPS beads, that serves as a blowing agent to foam the polystyrene some 12 to 100 times its original volume, depending on whether a very dense or very light foam-product is desired.

Summary of Standards:

Section 301 sets VOC limits for block makers. Section 301.1 limits the sum of VOC retained in the resulting blocks and the VOC that escaped during processing to 3.0 pounds for every 100 pounds of raw beads processed for block makers. Block-makers will also be allowed an alternative standard in Section 301.2 for making very light (<0.8 pounds pcf) or very dense products (2.0 pcf or more) blocks from raw beads containing more that 5.5% VOC. Facilities that manufacture these products will be allowed to limit the sum of VOC retained in the resulting blocks and the VOC that escaped during processing to 3.9 pound for every 100 pounds of raw beads processed. This alternative standard is further restricted to apply to no more than 10% of total raw material processed in calendar year 2006, moving down 1 percent per year to a 5% limit in 2011 and thereafter.

Two of the block making facilities affected by Rule 358 each installed a new VOC-emission control system (ECS) in the period since January 2001 when development of the rule was first begun. These ECSs, each of which includes a regenerative thermal oxidizer (RTO), were designed to produce a level of VOC reduction that can meet the emission standards of the new rule.

A second sector of EPS industry produces shapes. There is one shape molding facility in Maricopa County. This facility emits less than 15 tons of VOC per year. Were a shape molder to process sufficient raw EPS beads in a year to potentially emit 50 or more tons of VOC annually, Section 302 limits that the sum of VOC left in the newly molded shapes and the VOC that escaped in processing to 2.7 pounds for every 100 pounds of raw beads processed. Based on research, Maricopa County believes that shape plants can meet the same 2.7 lbs./ 100 lbs. that California's Bay Area Air Quality Management District adopted in 1999. EPS shape manufacturers should be able to meet this standard through the use of lower VOC beads and capture and control of a portion of the process emissions.

A third sector of EPS industry produces cups. Section 303 of Rule 358 limits the sum of VOC retained in the resulting cups and the VOC that escaped during processing to 3.2 pounds for every 100 pound of raw beads processed. The cup maker located in the South Coast Air Quality Management District (SCAQMD) chose to control emissions up to molding and make operational changes to the aging process to comply with the SCAQMD rule. The cup maker in Maricopa County also indicated that they believe that front-end controls and operational changes will be the most cost effective strategy for the local plant.

A fourth sector of the EPS industry expands raw expandable polystyrene particles into ultra-light packing material called loose fill. No molds are used. Rather, the raw material is tiny EPS particles that are already shaped to produce the desired forms when expansion is complete. The only loose-fill maker in Maricopa County is still relatively small. If its potential to emit VOC increases from current levels of less than 20 tons per year to 50 tons or more, the facility would need to comply with Rule 358. Section 304 limits the sum of the VOC that escapes during the processing and the VOC left in the resulting loose fill to 2.4 pounds for every 100 pounds of raw EPS particles processed into finished loose fill. Based on research, Maricopa County believes that loose fill plants can meet a 2.4 lbs./ 100 lbs. standard like the Bay Area and South Coast air districts adopted in California. EPS loose fill manufacturers should be able to meet this standard by capturing and controlling both the bead expansion and puff-aging processes.

7. A reference to any study relevant to the rule that the agency reviewed and either proposes to rely on in its evaluation of or justification for the rule or proposes not to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

1. Draft RACT Analysis of Rule 358 Expandable Polystyrene Foam, January 2005, Maricopa County Air Quality Department, Phoenix, Arizona.
2. BASF Corporation – Plastic Foams, Mt. Olive, NJ
   Technical Bulletin N-840, February 1999, Styropor® expandable polystyrene.
   Environmental – Pentane Emissions during Processing.
3. EPA/452/B-02-001 Control Cost Manual, September 2002, OAQPS, Research Triangle Park, N.C. 27711.
4. EPA "Control of VOC Emissions From Polystyrene Foam Manufacturing", OAQPS, Research Triangle Park, NC, Sept. 1990", EPA-450/3-90-020.
5. NOVA Chemicals®, Technical Memorandum, Pentane Material Balance M77B vs. M77BLV, Project No. DL-2001-140, Authors: Rick Hudson, Christine Hetzer, Confidential data.
6. PREMIER/INSULFOAM: Chino, California block/board plant. "Table 1: Residual Pentane-Testing Matrix". Blocks' Initial VOC-content as a function of the aging time of their constituent-puff.
7. South Coast Air Quality Management District Staff Report for Rule 1175, "Control Of Emissions From The Manufacture Of Polymeric Cellular (Foam) Products",1991, Laki Tisopoulos, et. al..
8. Bay Area Air Quality Management District Staff Report for Rule 8-52, "Polystyrene, Polypropylene and Polyethylene Foam Product Manufacturing Operations", Douglas Tolar, et. al., 1999.
9. WinCup/URS/Duane Morris Cost Analysis Of Post-Molding Controls/RACT Analysis For Pentane Emissions From Warehouse, WinCup – Tolleson, Arizona – November 3, 2003, December 2003, and January 2004.
10. WinCup informal study of VOC contents during various stages of cup production and after 18 and 22 days of storage, Corte Madera/Richmond CA operations.
11. WinCup informal study of VOC contents during various stages of cup production, April, June, November 2001. Spe-

cific details of this report may be confidential.

12. WinCup informal 6-week study at the Win-Cup Phoenix/Tolleson facility November and December 2002. VOC-contents of 4 different cup types (including 3 densities) determined when newly molded and after, respectively: 1, 2, 3, 4, and 7 days; and after 2, 3, 4, 5, and 6 weeks. Specific details of this report may be confidential. 2003.
13. WinCup/URS Pentane Control Analysis Report for WinCup - Tolleson, Arizona, December 2001.
14. WinCup/URS RACT Control Cost Documentation (Supplemental to December 2001 Report), January, 2004.

8. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

This economic statement (EIS) was developed to estimate the impact of the rule. The impact statement, comprising potential costs and benefits represents an estimate. Maricopa County has identified four facilities that expand polystyrene (EPS) to make foam products, each of whose uncontrolled VOC emissions exceed the major source threshold, 50 tons per year. Two of these facilities are Title V sources that expect to continue to emit more than 50 tons per year, even when controlling VOC emissions according to this rule. In addition, two of the four facilities recently installed new VOC-control devices. These two facilities provided information to the Department on actual costs for the new systems they installed. The Department used the actual costs to calculate cost effectiveness consistent with the methodology described in EPA Air Pollution Control Cost Manual – Sixth Edition (EPA 452/B-02-001), January 2002.

Two EPS block companies reported spending between $220,000 and $310,000 for their capital equipment. One of them also provided additional details. The County used the EPA default values to fill in the particular values which were not provided. Using this method, the cost effectiveness is $2,104 to $3,990 per ton of VOC reduced when the rule's standards are met. Based on limited testing information, block makers will probably have to increase aging times for some products. Increasing aging time will require additional aging capacity to maintain current production levels. The cost of a 1,500 cubic foot aging-bag ranges from approximately $1,100 to $5,000 while other costs – equipment, direct installation, and indirect costs – total from $1,350 to $4,500. If internal space is tight, vendors can also supply an external bead silo to expand aging capacity. The Department received an estimate for a 4,000 cubic feet silo of approximately $21,000 installed.

For the cup-maker, the County estimates a per-ton-reduced cost of $3,790 to $7,038; the midpoint estimate is $5,400. For these estimates, the County used data from the cost estimates submitted by the cup maker initially in 2002(ref.#13) for manufacturing processes and in 2004(ref.#9) for constructing total enclosures for storage, as well as quotes from oxidizer manufacturers. Both the cup maker and the County used methodology consistent with the EPA Cost(ref.#3) manual. Actual costs may be lower if the company's existing means of VOC control has sufficient capacity to also serve additional enclosure(s). The range of cost effectiveness is derived from the range of VOC emissions in the testing information supplied by the cup-maker.

The following table summarizes the cost effectiveness calculations. The details of the cost estimates can be found in the RACT Analysis for Rule 358.

Table 1: Rule Cost Effectiveness

Production Volume of Block Facilities	Est. 2001 VOC Emission TPY	Est. VOC Emission with Rule 358 TPY	Total VOC Emissions Reductions TPY	Annual cost of new ECS from RACT Analysis Appendix A-2	Annual cost per ton VOC reduced
Small block maker	63.1	27.7	35.4	**$170,936**	$4,824
Medium block maker	91.1	21.0	70.0	**$147,322**	$2,104
Large block maker	91.6	57.2	34.4	**$137,267**	$3,990
Cup-making facility	180.7	143.4	37.3	**$201,929**	$5,414

* EPA range of ± 30% = $3,790 – $7,038 for cost of ton reduced.

Staff also estimates the four facilities will each spend between $320,000 and $697,500 in initial capital costs. As noted above assuming a 10 year depreciation cycle for the capital costs, staff estimates annual costs will range from $137,270 to $201,930. These costs include the depreciated capital costs, utilities, labor, etc. Staff estimates that these costs will have an impact of $0.02—0.04 per pound of raw beads processed.

An SEC Form 10-Q quarterly report ending September 24, 2004, by the parent corporation of a Maricopa County EPS manufacturer also includes a discussion of the cost of goods sold. Beginning in July 2003 through September 2004, market prices of styrene monomer, the primary raw material in Company's foam products, increased by 81% to $0.70 per pound. They further note that prices for styrene monomer are forecasted by independent industry surveys and producer reports to decrease to $0.68 per pound by the end of 2004 and to $0.55 per pound by the end of 2005. The report also indicated that the Company has been able to pass on the majority of past raw material price increases to customers. All facilities subject to Rule 358 will have to make compliance-cost decisions regarding controls, process changes, and whether or how much of the compliance costs to pass on to consumers.

Economic Impacts On County Resources:

Maricopa County Air Quality Department has compliance and enforcement programs to handle VOC emissions from expandable polystyrene foam manufacturing. There will be some costs to Maricopa County due to the projected costs that accrue for implementation and enforcement of the new standards. However, it should not be necessary to adjust the Department's budget to implement this rule.

Health Costs:

Because Maricopa County is a serious nonattainment area for ozone, which these revisions address, it is imperative to consider the medical and social costs of failing to take steps toward the improvement of the air quality. Adverse health effects from air pollution result in a number of economic and social consequences, including:

1. Medical Costs -- Personal out-of-pocket expenses of the affected individual (or family), plus costs paid by insurance or Medicare, for example.

2. Work loss – Lost personal income, plus lost productivity whether the individual is compensated for the time or not. For example, some individuals may perceive no income loss because they receive sick pay, but sick pay is a cost of business and reflects lost productivity.

3. Increased Costs For Chores And Caregiving – Special caregiving and services that are not reflected in medical costs. These costs may occur, because some health effects reduce the affected individual's ability to undertake some or all normal chores. The affected individual may require extra care.

4. Other Social And Economic Costs – Restrictions on or reduced enjoyment of leisure activities, increased discomfort or inconvenience, increased pain and suffering, anxiety about the future, and concern and inconvenience to family members.

Rule Impact Reduction On Small Businesses:

A.R.S. § 41-1055 requires Maricopa County to reduce the impact on small businesses by using certain methods when they are legal and feasible in meeting the statutory objectives of the rulemaking. A small business is defined in A.R.S. § 41-1001 as a "concern, including its affiliates, which is independently owned and operated, which is not dominant in its field and which employs fewer than one hundred full-time employees or which had gross annual receipts of less than four million dollars in its last fiscal year. For purposes of a specific rule, an agency may define small business to include more persons if it finds that such a definition is necessary to adapt the rule to the needs and problems of small businesses and organizations." The Department addressed this criteria through exemptions and conducting a RACT analysis on those industries that will be subject to the Rule 358. New Rule 358 exempts facilities from control requirements when the total VOC content of all raw EPS material processed is below 50 tons (100,000 lbs.) each calendar year and below 12,000 pounds each calendar month. This threshold reduced the number of small sources subject to the rule.

10. A description of the changes between the proposed rule, including supplemental rules, and final rule:

There were changes made to Rule 358 that are not substantive. The following non-substantive administrative changes were made between the text of the proposed rule and the text of the final rule to make the rule more concise and easier to understand:

Section 201- Changed the last sentence by deleting "the time and."

Section 401.1- Changed the section referred to from 502.2b to 502.2c.

Section 401.2- Deleted the phrase "and, for block-makers, Section 502.4."

Section 503- Final Subsection- Changed the incorrect subsection number, "503.8" to "503.9".

11. A summary of the comments made regarding the rule and the agency response to them:

RULE PREAMBLE

Comment #1: Because proposed Rule 358 has a direct effect on only one EPS cup molding facility, the RACT Analysis is, essentially, a source-specific finding of RACT for the WinCup facility. WinCup requests that the Rule contain

an unambiguous statement that the chosen numerical standard (3.2 lbs VOC) is to be met by the application of the control strategy (pre-molding enclosure) identified as RACT by AQD in its RACT Analysis. WinCup acknowledges that a numerical standard that is not explicitly tied to specific control equipment provides flexibility for a source to meet the stated emission goal. However, this same flexibility leaves the proposed Rule open to misinterpretation. This is particularly true because the RACT Analysis does not establish a connection between the control strategy deemed to be RACT (pre-molding enclosure) and the numerical standard set by the proposed Rule (3.2 lbs. VOC).

Response #1: While WinCup is only cup manufacturer in Maricopa County, several other companies produce cups in various locations across the country. The Department reviewed RACT regulations in other jurisdictions for cup manufacturing and sought information on how companies complied with those regulations. The Department must start with the standards from other jurisdictions already approved as RACT and justify any differences between the County's proposed standards and those already approved RACT standards. The Department did collect data and proposed to modify standards from Bay Area Air Quality Management District in California where we had appropriate justification. The RACT analysis cited in the preamble describes the justifications used to derive the 3.2 lbs standard for cups proposed in Rule 358. To summarize, the Department agreed to add a value of 0.4 lbs. to the Bay area standard of 2.8 lbs. to account for the residual VOC that would remain in products once they were shipped from the Phoenix plant. To arrive at 0.4 lbs. VOC, the Department reviewed all cup storage studies it had received. Since the rule requires that performance testing take place in summer, the Department chose an October data set from the Corte Madera facility (the warmest month among the data sets) and extrapolated the data from 22 days in that study to 28 days, the average storage period for the Phoenix plant as provided by WinCup.

In the South Coast Air Quality Management District (SCAQMD), Dart Container Corporation's California cup facility encloses and controls all pre-molding processes and actively ages pre-puff to meet the Rule 1175 standard of 2.4 lbs. VOC/100 lbs. The 3.2 standard for EPS cups in Maricopa County's Rule 358 is 0.8 lbs. higher than the analogous standard required of Dart Container by Rule 1175. Once a successful strategy for complying with the rule is identified, the Department does not preclude the use of other techniques or systems that may be used to comply with a rule. For example, we do not reject the use of post-molding emission control or control of selected molding emissions as potentially viable parts of an overall RACT strategy. Should a facility choose not to capture all VOC emitted prior to molding or to modify aging practices, other combinations of cost-effective solutions can be implemented. For example, some of the test data submitted to the Department indicate molding losses of 0.8 lbs VOC/100 lbs. and storage losses of 1.0 lbs VOC/100 lbs. over the first 24 hours. Smaller controlled enclosures of molding or storage areas for individual high volume products with either of these two emission rates can be cost effective.

The Department assumes that a period of adjustment to research, experiment, and train staff will be required in order for an affected EPS molder to change manufacturing practices to meet the applicable standard in the proposed rule. Dart reports that the company implemented significant changes in control equipment and manufacturing practices and developed new quality control procedures in order to comply with the South Coast standard.

Comment #2: Wincup believes that the preamble (Notice of Proposed Rulemaking) incorrectly creates an impression of commonality between segments of the EPS industry that are actually very different. WinCup acknowledges that there are superficial similarities between these operations: each uses pentane-impregnated polystyrene resin as a raw material, each expands the raw material through the application of heat, usually in the form of steam, and each, to differing degrees, molds the product as a final or intermediate step in processing. However, for the purpose of this rulemaking, it is the categories of EPS facilities widely differ. Block manufacturers, for example, operate in a batch process, use extremely large molds, and manufacture products that require a post-molding curing process, and often both molding and curing processes are accomplished in enclosed areas suitable for venting. Cup manufacturing is a continuous process that requires no curing of the product. Cup products are immediately wrapped and boxed, ready for off-site shipment. Cup molding and storage occur in extremely large open manufacturing spaces that are not conducive to capture of fugitive emissions.

Response #2: The intent of this section of the preamble was to describe the basic process for manufacturing expandable polystyrene products. Further detail that distinguishes various product manufacturing sectors can be found in the RACT analysis cited in the preamble. In the comment, the distinction made between manufacturing spaces and the post-molding experiences of cups versus blocks differs from the Department's perception of the situation. In Maricopa County, block manufacturing and storage also occur in extremely large open spaces. All of the block manufacturers have installed or are in the processing of installing enclosures and controls for processes through molding. Blocks can be shipped out almost immediately after they are molded. Although a block does need to cure before it is cut, the customer can do the curing. The curing is essentially a holding period during which a block is kept out of the rain/snow sufficiently long to evaporate the moisture that was injected into it as steam during the molding process. There is rarely an advantage to shipping immediately, so the blocks normally are held at the block-making facility to cure. During the summer in Phoenix, most blocks that are protected from rain cure within five days.

Cup delivery to retail or wholesale customers directly after packaging rarely occurs. Because of the flammability hazards associated with both the high pentane content of fresh cups and the pentane that diffuses from these cups into the packaging, cups remain within the manufacturer's warehousing and distribution system for a period of time. Like blocks, fresh molded, packaged cups can be shipped immediately if properly supervised. Most cup facilities also hold their new products in the facility's own on-site warehouse before the cups are shipped to customers. In study of storage times, the Phoenix WinCup facility indicated that the average storage period was 28 days.

Comment #3: WinCup believes that the numerical standard may have been set at a level that is beyond the reach of RACT. Certainty this issue requires additional technical review (and such review should be completed prior to the necessary re-publication of the proposed Rule). However, should the stated emission limit prove too stringent (i.e. beyond RACT) for the WinCup facility, one logical modification to the Rule might be to adopt an alternate operating scenario for certain cup products. WinCup believes it would be prudent to note in this section of the Rule the specifics of each EPS manufacturing segment's processes and emission characteristics to further justify the necessary variation in the RACT requirements for each facility and/or for the varying methods of measuring compliance with the Rule.

Response #3: While WinCup indicated in a phone conversation that their initial experiments hadn't always worked, WinCup has not yet supplied the Department with documentation that the numerical standard cannot be met. At this time, the experience of the Dart Container Corporation operation in Corona provides evidence that compliance with an even tighter numerical standard is possible. Should WinCup experience difficulties, however, the Department will work with WinCup and EPA to revise Rule 358. With additional documentation and justification that will meet EPA's criteria, we may be able to develop a more flexible standard for problematic products. To date, staff has not received documentation that would support an averaging option or any other alternate operating scenario for certain cup products or been involved in discussion as to what documentation will be necessary.

The Department again notes that the RACT Analysis cited in the preamble contains the specifics of each EPS manufacturing segment's processes and emission characteristics. The analysis also justifies the necessary variation in the RACT requirements for each product sector.

Comment #4: WinCup understands the purpose of this section of the Rule preamble is to identify the basis for the level of emission control applicable to EPS cup manufacturing. However, the statements made in this section, when taken together, do not explain the basis for AQD's choice of a 3.2 lbs. VOC emission standard or how that emission standard relates to the pollution control strategies investigated in the RACT Analysis.

WinCup believes that this provision of the preamble should first contain a summary of the RACT Analysis as it relates to the choice of control equipment deemed to be RACT for the WinCup facility. The preamble should also identify those control measures that were reviewed in the RACT Analysis and deemed either technically or economically unreasonable. This would include a clear statement that molding and post-molding controls are not RACT for the WinCup facility. This revision would add clarity to the specific control techniques that AQD is requiring cup manufacturers to implement in order to meet the promulgated standard.

Response #4: The purpose of the summary of proposed standards section of the preamble is to list the standards proposed in the rule with a brief description. The text in the section also describes how a source might comply with the standard. The Department does not describe the basis for the level of control nor list all the possible control options in this section of the preamble. See comment #1 for a discussion on the basis for the proposed standards and pollution control strategies and techniques.

Comment #5: AQD should also provide in this preamble (and in the RACT Analysis) a technical explanation of how EPS cup facilities can meet the numerical standard (3.2 lbs. VOC) through use of a pre-molding enclosure and operational (pre-puff aging) changes. This explanation must account for the applicability of the referenced operational (aging) changes to the specific products (each of which has a unique specification) at the WinCup facility. At present, both the RACT Analysis and the preamble to the proposed Rule are devoid of such analysis. The general reference to a "cup maker located in South Coast Air Quality Management District," without accompanying specific information about its products and processes, is not meaningful.

Response #5: The Department does not recommend any specific technology to comply with a rule. Generally, the Department does provide information on the most probable technology that will be utilized. Like Dart's Corona facility, the Department anticipates that Phoenix Wincup facility will also have to experiment with various process control and aging options to comply with the rule standards. The commenter is asking that the Department obtain and share confidential business information (CBI) from its competitor as to operation specific data. The Department lacks standing to obtain CBI from a source not under County jurisdiction. Furthermore, if the Department did obtain process and product specific data identified as CBI, the Department could not legally share that information with WinCup. In addition, the WinCup facility has not provided the Department with that level of detail on all of its own operations and did identify CBI in the information and data it did submit, precluding mention of that data in public documents.

However, the Department did contact Dart Container Corporation to collect additional information on product types manufactured at the South Coast cup maker as requested by the commenter, and received the following response:

"On behalf of Dart Container Corporation, we feel obligated to provide the following information in response to your inquiry. Please know that we consider much of our process as proprietary, however the information you requested is available from our sales department or could be obtained by testing commercially available products.

The Corona, CA facility produces molded cups and containers from beads using the EPS steam molding process. We consider the Corona facility to be capable of producing our entire product line with no changes to our corporate product specifications. From this plant, we manufacture and ship a broad product line which includes various style and sizes of drink cups, molded foam lids, bowls and containers, including containers that are sold to soup manufacturers for use as packaging. The range of product densities used to manufacture these products is between 2.2 to 4.2 pounds

per cubic feet. There are a few items that are imported and then distributed from this location because it is not economically effective to maintain the tooling to produce them in small volumes. This is an economic and logistic decision, not a technical one. Noodle cups are not one of these items.

The products produced at Corona are subject to the same specifications and requirements met by all the other Dart plants as judged by our national customers and our corporate quality group."

Based on the data WinCup has submitted to the Department so far, most of WinCup's product line is very similar to the Dart product line with similar densities. In an e-mail dated April 12, 2005 WinCup informed the Department that they also produce some products with densities exceeding 5 pcf.

In Appendix A-2, Table II of the RACT Analysis, the Department outlined the costs of front-end control, including a new RTO installation, a total enclosure, and an aging system that uses waste boiler heat. This estimate is conservative in that it deliberately overprices the active aging system with its heat exchanger and makes no use of the existing additional boiler capacity that, nonetheless, is currently available to oxidize some of the VOC emissions. The dimensions of the total enclosure were given to AQD by a WinCup environmental engineer. Costs for material and its installation for constructing the enclosure were adapted from the "WinCup/URS/Cooley Cost Analysis Of Post-Molding Controls, December 2003". The cost per ton reduced is given as $5,414. Using EPA's costing-span convention, namely ±30%, the high cost is $7,038 and the low, $3,790. These costs are also summarized in the economic impact summary in section 9 of the rule preamble.

Comment #6: One commenter asked that company names be removed from the summary table in the economic impact section of the preamble in the notices of rulemaking.

Response #6: We inserted general type and size descriptions in place of facility names.

Comment #7: One commenter asks why the 2001 emissions estimated in the Notice of Rulemaking differ from those earlier accepted by the Department.

Response #7: The emissions test at the commenter's facility lacked any determination of VOC capture efficiency by the emission control system. Therefore, there was no basis provided by the source test on which to base an emission factor. The permit engineer assigned to the facility in the last 2 years used emission factors that are different from the emission factors used by AQD's Inventory Section in 2002 to estimate 2001 emissions. These factors were influenced by investigations at the site in 2003 and 2004 by EPA and Maricopa County that pointed to a much smaller capture of aging emissions than was previously assumed, and assigned substantial emissions during the period between molding and shipping the products.

Comment #8: WinCup requests that the Rule reference sections be made to conform to the RACT Analysis references. Such conformance will assist in the interpretation of the Rule and any inferences derived from the technical information that AQD used to support its findings. Furthermore, WinCup notes that information it provided to AQD during the rulemaking is discussed in several sections of both the RACT Analysis and the preamble, but is either incorrectly cited or omitted from the appropriate reference sections. WinCup requests that specific citation to the following submittals be added to the reference list in the RACT Analysis and the Notice of Proposed Rulemaking:

WinCup/URS Pentane Control Analysis Report for WinCup - Tolleson, Arizona, December 2001

WinCup/URS RACT Control Cost Documentation (Supplemental to December 2001 Report), January, 2004.

Response #8: References have been cited and/or corrected and the 2 references were added to the reference list in the RACT Analysis and the Notice of Proposed Rulemaking

Comment #9: WinCup notes that the basis for this cost estimate and the use of cost data provided by WinCup is unclear. WinCup requests that this provision of the preamble and the corresponding discussion of WinCup-specific control costs in the RACT Analysis specifically reference WinCup's submittals on this matter. These references would include, at a minimum, the following: WinCup/URS Pentane Control Analysis Report, December 2001,

WinCup/URS RACT Control Cost Documentation (Supplemental to December 2001 Report), January, 2004 and

WinCup/URS Cost Analysis Of Post-Molding Controls, December 2003.

Comment #9: The following text that explains the cost calculations has been added to the Final Notice of Rulemaking and the RACT Analysis:

In Appendix A-2, Table II of the RACT Analysis, the Department outlined the costs of front-end control, including a new RTO installation, a total enclosure, and an aging system that uses waste boiler heat. This estimate is conservative in that it deliberately overprices the active aging system with its heat exchanger and makes no use of the existing additional boiler capacity. The dimensions of the total enclosure were given to AQD by a WinCup environmental engineer. Costs for materials and installation for constructing the enclosure were adapted from the "WinCup/URS/Cooley Cost Analysis Of Post-Molding Controls, December 2003". The cost per ton reduced is given as $5,414. Using EPA's costing-span convention, namely ±30%, the high cost is $7,038 and the low, $3,790. These costs are also summarized in the economic impact summary in section 9 of the rule preamble.

The WinCup/URS Cost Analysis Of Post-Molding Controls, December 2003, was also added to the reference list in the preamble.

COMMENTS ORGANIZED BY SECTION NUMBER

Section 200: Definitions

Comment #10: Two commenters requested that the word "time" be removed from Subsection 201 the definition of bead-lot and bead-lot identifier. They noted that manufacturers only list the date and do not list the time of packaging.

Response #10: The Department agrees and removed the word "time" from the last sentence of the definition.

Comment #11: Subsection 215.1 and 215.2 refer to ASTM designations. ASTM does not use the symbol "#" or the abbreviation "No." when referring to its standards or test methods. The references to ASTM designations should read ASTM Method C303.

Response #11: The "#" symbol has been deleted from the ASTM references in both rule 358 and the RACT Analysis.

Section 300: Standards

Comment #12: There were several comments from the same commenter requesting that the time period for determining compliance with the standards in Section 301 be one year. The commenter further notes that Subsection 301.1 contains a VOC "emission" limit, but there is no mention of the emission limit averaging time (instantaneously, hourly, daily, or yearly). Due to inherent process variability and upset conditions, sources may not be able to achieve continuous compliance based on an instantaneous, hourly or even daily average emissions basis.

Response #12: The standard in Subsection 301.1 is based on a point-in-time determination. The point-in-time standard must be met during each day of operation and for each product-type produced. In practice, determination of compliance is made within the time parameters set in the source test protocol. Such parameters are determined by the Department in consultation with the testing contractor, according to the nature of the EPS processes and the characteristics of the particular test method(s) chosen.

Comment #13: In Section 301.1 the block standard states: "Limit the sum of both the VOC that escaped to atmosphere and the residual VOC in the resulting blocks at the time they are released from the molding machine to not more than 3.0 pounds for every 100 pounds of raw beads processed".

The commenter is concerned that the RACT evaluation has not thoroughly evaluated the potential impact of this requirement on local molders. Specifically, it is not clear that the evaluation includes sufficient technical justification for the proposed standard. It follows that the technical and economic feasibility may not have been established to the degree required by the relevant statutes (e.g. ARS 49-112(A)). The commenter expressed concern that the standard is based on limited information. The RACT analysis, in section 8.4, indicates that the standard was based in large part on data collected at two of Premier's facilities. The commenter points out the following with respect to that data:

a. The tests were run using only a limited number of EPS bead types,
b. Relatively few data points were collected for each bead type/product type combination,
c. As the analysis points out, the tests were experimental, and were not intended to reflect normal aging times at the facility. The twenty-four hour aging periods that were tested were intended to determine the degree to which extended aging times might reduce block residual contents, but were neither intended nor advertised as technically or economically feasible alternatives for continual operation. Twenty-four hour aging periods are not "normally encountered", as implied by the RACT evaluation, for the majority of our production.

Response #13: When developing the Rule 358 standards, the Department reviewed RACT regulations in other jurisdictions for expandable polystyrene foam manufacturing and sought information on how companies complied with those regulations. The Department must start with the standards from other jurisdictions already approved as RACT and justify any differences between the County's proposed standards and those already federally approved RACT standards. The Department did collect data and proposed to modify standards from Bay Area Air Quality Management District and the South Coast Air Quality Management District in California where we had appropriate justification. The data sets supplied by Premier provided justification for the 3.0 lbs. standard in Rule 358 that is 0.3 lbs. higher than the Bay Area standard and 0.6 lbs. higher than the South Coast standard.

The number of EPS bead types and data points collected is typical for testing performed by an individual company. While the tests were run using a limited number of EPS bead types, the tests demonstrate that the Rule 358 standard can be achieved. Furthermore, the tests also used a bead model that is representative of a significant quantity of mid-range beads used in this region with actual VOC contents near the maximum normally encountered with using mid-range VOC beads. Local manufacturers have begun using mid-range and low-VOC beads. They may also be able to switch to beads containing lower percentages of iso-pentane in the blowing agent. The use of low VOC materials or reformulation of raw materials is a strategy frequently selected by many industries to comply with various air quality regulations

Based on the tests, not all products would have to be aged 24 hours. In addition, these tests were performed from November through January during meteorological conditions that generally require longer aging periods. While Premier may not age for 24 hours, other local block makers do age for longer periods of time. Generally, 24 hours is the maximum normal aging time. To minimize the impact of extended aging periods, the Department did anticipate that

facilities would probably install additional aging capacity to maintain production schedules. Another option may involve the installation of hot rooms to actively age pre-puff.

The Department's analysis shows that the installation of the additional controls is cost effective ranging from approximately $2100 to $4800 per ton VOC reduced. The cost of a 1,500 cubic foot aging-bag ranges from approximately $1,100 to $5,000 while other equipment, direct installation, and indirect costs range from $1,350 plus $4,500. The Department received an estimate for a 4,000 cubic feet silo of approximately $10,000 including ducting and other equipment, direct installation, and indirect costs will be approximately another $10,000. If internal space is tight, vendors can also supply an external bead silo to expand aging capacity. For example, if a plant doubles its aging capacity, the amortized costs per ton will range from $240--$300 for silos and $22--$26 if bags are chosen. Adding in annual operating costs could increase this estimate to $500 per ton controlled, increasing the expenditures cited above to $2600 to $5300 per ton, an amount still well within the RACT cost range.

Like the other block manufacturers in Maricopa County and California, Premier will face compliance-cost decisions about changing raw materials, aging processes and equipment, and add-on control equipment. They will also face decisions about passing on increased compliance costs to consumers.

Comment #14: The RACT evaluation does not thoroughly evaluate all impacts. The RACT document mentions on a number of impacts associated with demonstrating compliance with the standard, without providing thorough evaluations of the resulting technical and economic difficulties, or providing justification that such evaluations are not necessary.

Specifically, lower pentane content beads have limited availability. The RACT document itself recognizes that two-thirds of beads currently available in the market have pentane contents in excess of 5.0%,

Response #14: The RACT document further points out that only the supply of low-range VOC beads is actually less than the demand for the beads. Furthermore, all of the block manufacturers in Maricopa County have been using mid-range VOC beads for at least the last 18 months to 2 years. They all face similar market conditions and must make the same compliance-costs decisions regarding the purchase of raw materials. The rule does contain a limited alternative operating scenario that allows the use of high VOC beads to manufacture very light and very dense products. The rule does not necessarily preclude a plant from using higher VOC beads to produce other products, though, obviously, additional processing and expense would be necessary to comply with the standard.

Comment #15: Products produced with lower pentane beads have more limited capability to "take" recycled foam. Due to physical performance requirements as well as cosmetic requirements, the amount of regrind that may be added to a specific product is relative to the pentane content of the fresh or "virgin" bead. Products manufactured from higher pentane beads can be made using a higher proportion of regrind than can those with lower pentane contents. Therefore, a push to lower pentane content will limit the amount of regrind that can be added, resulting in a higher proportion of virgin bead (and emissions) per pound of product than might otherwise be necessary.

The regrind that cannot be put into the product will also have to be taken to the landfill for disposal. Both of these impacts will result in an increase in the cost of production. The RACT evaluation should demonstrate that these environmental and economic impacts are justifiable. The rule should also make explicit allowance for considering regrind in the calculation of compliance with the standard, to help offset these negative impacts.

Response #15: The standard is designed to be met using mid-range VOC beads. Local manufacturers are able to include regrind with mid-range VOC beads and can utilize the scrap they produce at current production levels if they choose. Furthermore, the Department recently issues a permit to construct and operate a new business that combines ground up EPS waste with concrete to form building blocks. This firm will provide a market for EPS scrap. There is no basis to make the revisions suggested by the commenter.

Comment #16: The evaluation appears based on the need to age mid-pentane beads as long as 24 hours in order to meet the standard. For the lower density products, the bulk of production, this could result in a significant increase in the facility's normal aging time. In those cases, compliance could require either curtailing production, or significantly expanding the size of the aging process. Either of these requirements would result in economic impacts that are not addressed by the RACT evaluation. The RACT evaluation mentions the importance of quick turnaround requirements between product orders and shipment, but does not evaluate the impact of increased production (aging) time on that requirement.

Response #16: See Response #12. The Department will include the cost analysis for additional aging capacity into the notice of final rulemaking. Another option that Premier fails to mention would be the installation of a hot room around the aging space to decrease the amount of time necessary to further reduce VOC during aging. To summarize, Premier will have several options, other than curtailing production, for aging process modifications that will minimize impacts on current production practices and have relatively low cost increments

Comment #17: There were some reasonable, alternative wordings proposed for expressing the provisions in Sections 301.1 and 301.2.

Response #17: These suggestions helped guide the final version, which was the result of a group consensus process.

Comment #18: In Section 301.2, we want the initial, annual allowance for Specialty Products of 10% of annual-throughput to be unaltered in the future, not steadily reduced by 1% per year to 5% of throughput for all years after

2010. There are presently being developed many new products that use ultra high density foam for new applications as well as old. In time these products may become an important commodity sector of the expanding polystyrene industry. For that reason, we want you to justify the reduction spelled out in Table I.

Response #18: In granting subsection 301.2, as an alternative operating scenario, EPA construed it loosely as an exemption for raw beads used to make specialty products of unusual densities. Some more advanced facilities can make most or all of these specialty products while complying with the primary standard of subsection 301.1. While allowing initially up to 10% of raw materials to fall under this alternative for making specialty products, EPA wanted the rule ultimately to parallel a particular EPA policy, termed the "5 percent equivalency rule". This policy limits the total emissions from all exemptions in a new RACT rule to not more than 5% of total annual emissions predicted once a RACT rule has been fully implemented without any exemptions. By limiting total use of the alternative operating scenario after 2010 to 5% of annual raw material use, the effect will be to put Rule 358 essentially in compliance with the 5 percent equivalency rule. While technically, the theoretical maximum emissions could be up to 8% of emissions under a no-exemptions RACT after 2010, actual emissions from specialty products is currently no more than 5% of total emission predicted when Rule 358 is fully in effect.

Comment #19: The rule should make clear that other sources of VOC emissions (boilers, RTO) are not included in the compliance calculus [for the standards in Sections 301.1, 301.2, 302, 303, and 304].

Response #19: Specifically, anything used within the ECS is part of the compliance calculation. Generally, the following sources may be excluded in determining compliance with any standard in Sections 301.1, 301.2, 302, 303, and 304, provided the releases don't take place within the ECS. For example, VOC emissions from any boiler, from solvent cleaning, and from product printing/labeling devices, may be excluded, though the sources are subject to the requirements of other Maricopa County Air Pollution Control rules. However, the Department may review the circumstances of any specific facility, as necessary, on a case-by-case basis to determine which sources are excluded.

Emissions from control devices are included in the compliance calculation. These emissions are subject to measurement during a test of compliance with a Rule 358 standard. The measurement is used in the mass balance equation(s) to determine the critical value: the total amount of VOC that escaped to atmosphere. Emissions from those VOC control devices that are used to meet a standard are restricted by the provisions under Section 305.

Comment #20: WinCup believes that AQD has not demonstrated a rational basis between the emission standard represented in Section 303 and the control technology identified in the RACT Analysis for cup manufacturing operations. To determine what additional emission controls would be reasonable for the WinCup facility, RACT methodology required AQD to evaluate available control technology for the facility and then estimate the corresponding emission reduction caused by the hypothetical application of such technology. In each iteration of this analysis, the cost of control per additional ton of VOC reduced (on an annual basis) was estimated and compared to a predetermined range of reasonably acceptable costs. The AQD has represented reasonably acceptable costs to be in the range of $7,000-$8,000 per additional ton of VOC removed. Control measures whose cost exceeded this threshold were eliminated as being beyond RACT; control measures within this range were retained for consideration.

For the WinCup facility, AQD eliminated control of molding emissions and control of post-molding emissions as having a cost threshold that exceeded RACT. In recent conversations, AQD and Maricopa County confirmed to WinCup that the present version of Rule 358 is not intended to require control of these emissions. RACT for the WinCup facility has been identified in the RACT Analysis as the enclosure of the WinCup manufacturing process prior to cup molding (i.e., the "front end") within a Permanent Total Enclosure ("PTE") and the venting of captured emissions to a control device. On this basis AQD estimated that the chosen control measure would reduce VOC emissions by an additional 37 tons per year at the WinCup facility. However, AQD does not explain either in the RACT Analysis or in the Rule how it derived the current Section 303 standard (i.e., 3.2 lbs VOC) from the emission reductions it predicted in the RACT Analysis.

The only discussion of the derivation of the numerical standard (3.2 lbs VOC) is contained in the RACT Analysis, where AQD states that "Maricopa County added the residual VOC from finished cups stored 28 days in Phoenix, 0.4 lbs. VOC, to a SIP approved Bay Area standard, 2.8 lbs. VOC/100 lbs. beads, to derive the 3.2 lbs. VOC/100 lbs. beads standard as proposed." See RACT Analysis, Section 10 at p. 42. No further explication or explanation is provided as to the basis for the Bay Area (California) 2.8 lbs VOC standard, or as to the source of the cited 0.4 lbs. residual VOC value in the Phoenix plant cups. Rather, AQD has simply adopted (albeit with slight modification) a standard from another jurisdiction without consideration of whether that standard is consistent with AQD's own RACT Analysis. The Section 303 standard is therefore arbitrary and without basis.

Response #20: While WinCup is only cup manufacturer in Maricopa County, several other companies produce cups in various locations across the country. The Department reviewed RACT regulations in other jurisdictions for cup manufacturing and sought information on how companies complied with those regulations. EPA has approved at least 2 RACT rules in Region IX for expandable polystyrene foam manufacturing. Since the other federally approved RACT rules exist, the Department must use those rules as a starting point in its development of standards. The Department must start with the standards from other jurisdictions already approved as RACT and justify any differences between the County's proposed standards and those already approved RACT standards. The Department did collect data and proposed to modify standards from Bay Area Air Quality Management District in California where

we had appropriate justification. The Department does not believe that the Section 303 standard is arbitrary and without basis.

The RACT analysis cited in the preamble describes the justifications used to modify the Bay Area 2.8 lbs. standard and derive the 3.2 lbs standard for cups proposed in Rule 358. To summarize, the Department agreed to add a value of 0.4 lbs. to the Bay area standard of 2.8 lbs. to account for the residual VOC that would remain in products once they were shipped from the Phoenix plant. To arrive at 0.4 lbs. VOC, the Department reviewed all of the long-term cup storage studies it had received. Since the rule requires that performance testing take place in summer, the Department chose an October data set from the WinCup Corte Madera facility (the warmest month among the data sets) and extrapolated the data from 22 days in that study to 28 days, the average storage period for the Phoenix plant as provided by the WinCup Phoenix plant.

In the South Coast Air Quality Management District (SCAQMD), Dart Container Corporation's California cup facility encloses and controls all pre-molding processes and actively ages pre-puff to meet the Rule 1175 standard of 2.4 lbs. VOC/100 lbs. The 3.2 standard for EPS cups in Maricopa County's Rule 358 is 0.8 lbs. higher than the analogous standard required of Dart Container by Rule 1175. Once a successful strategy for complying with the rule is identified, the Department does not preclude the use of other techniques or systems that may be used to comply with a rule. For example, we do not reject the use of post-molding emission control or control of selected molding emissions as potentially viable parts of an overall RACT strategy. Should a facility chose not to capture all VOC emitted prior to molding or to modify aging practices, other combinations of cost-effective solutions can be implemented. For example, some of the test data submitted to the Department indicate molding losses of 0.8 lbs VOC/100 lbs. and storage losses of 1.0 lbs VOC/100 lbs. over the first 24 hours. Smaller controlled enclosures of molding or storage areas for individual high volume products with either of these two emission rates can be cost effective.

The Department assumes that a period of adjustment to research, experiment, and train staff will be required in order for an affected EPS molder to change manufacturing practices to meet the applicable standard in the proposed rule. Dart reports that the company implemented significant changes in control equipment and manufacturing practices and developed new quality control procedures in order to comply with the South Coast standard.

Based on the Dart experience and WinCup's stated preference for front-end modifications, the Department believes that WinCup may be able to comply with the Rule through front-end modifications. However, that belief does not preclude the use of other combinations of solutions mentioned in the prior paragraph. WinCup, like Dart, will face compliance-cost decisions about installing controls and implementing process modifications.

Comment #21: WinCup also notes that BAAQMD Rule 8-52 was promulgated as a California BARCT ("Best Available Retrofit Control Technology") rule and does not represent RACT even within the Bay Area. Under California regulation, BARCT limits are more stringent than RACT limits for the same source. See, e.g., Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology For Adhesives And Sealants, State of California Air Resources Board, December 1998 at p. 11. Consequently, AQD can not arbitrarily adopt the Rule 8-52 standard as the basis for a RACT rule because, by definition, the Bay Area rule is not a RACT rule.

Response #21: Both the Bay Area Rule 8-52 and South Coast Rule 1175 were submitted to EPA to satisfy the requirements to implement RACT under Sections 172 and 182 of the Clean Air Act. In referencing the California document, the commenter overlooked the word "Generally," that began the referenced statement. RACT and BACT or BARCT may be the same, particularly when add-on control technology is utilized as part of a control technology determination. The Department modified the Rule 8-52 standard increasing it by 0.4 lbs. and, therefore, does not believe that action is arbitrary.

Comment #22: WinCup continues to object to the reference in Section 303 that the residual VOC content in finished product that has already been shipped from the plant be measured against WinCup's compliance with the proposed standard. AQD has perhaps attempted to respond to this continuing objection in its derivation of the Rule 303 standard. The RACT Analysis states that AQD has modified the proposed standard by adding "the residual VOC from finished cups stored 28 days in Phoenix, 0.4 lbs. VOC,' to [the] SIP approved Bay Area standard." See RACT Analysis, Section 10 at p. 42. WinCup views this statement as an acknowledgement by AQD that Maricopa County lacks jurisdiction to regulate WinCup's finished product once it is shipped from the manufacturing facility. However, the proffered AQD solution seems arbitrary: on one hand, the explanation of the standard indicates that residual VOC content was effectively removed from consideration yet; on the other hand, the Rule itself seems to state that such VOC content must be included. WinCup believes that the proposed Rule should be clarified to exempt such emissions from Rule 358 consideration.

Response #22: Since it is not practical or cost effective to test each shipment for VOC content when it leaves the plant, the Department had to develop a surrogate standard that could be applied at a set point in the process. The Department modified the Bay Area 2.8 lbs. standard by adding 0.4 lbs as representative of the summertime average residual VOC content to address WinCup concerns. This approach removes the necessity to address residual VOC at shipment in the rule. The Department uses surrogates in rules when ascertaining actual emissions of specific processes is impractical. The Department does not believe that the standard is arbitrary or that the Rule needs further clarification.

Comment #23: Irrespective of the nature of the BAAQMD rule (i.e., RACT, BARCT, etc.), AQD is required to demonstrate the technical and economic feasibility of applying the BAAQMD 2.8 lbs. VOC rule (plus residual VOC in

finished products when shipped) in Maricopa County. The record indicates that no such analysis was performed. In fact, in an earlier version of the RACT Analysis, AQD compared emission capture cost estimates for the Phoenix facility and those made by BAAQMD for the Corte Madera facility and acknowledged that there were significant differences between the facilities. Draft RACT Analysis, November 2003. AQD noted that for identical control measures, the Phoenix facility cost estimate contained "extensive capture provisions" due to the fact that there was "at least 50% more space in the Phoenix cup plant as in the Bay Area cup plant making ducting and duct supports much more extensive and expensive." Draft RACT Analysis, November 2003 at p. 29-30. This language is not present in the current RACT Analysis, but it demonstrates that AQD has knowledge of the operational differences between the WinCup facilities. AQD must demonstrate the feasibility of a Section 303 standard based on the physical structures and layout of the Phoenix plant, not some other plant. AQD can not simply borrow the BAAQMD 2.8 lbs. VOC standard and assume either its validity for the Bay Area plant or its applicability to the Phoenix plant.

Response #23: As already noted in responses 5 and 9, the cost analysis of front-end controls and active aging for the WinCup Phoenix plant was based on actual dimensions supplied by WinCup and found to be cost effective. The differences in sizes and plant layout between Phoenix and Corte Madera are not germane since the cost analysis was specific to the Phoenix plant physical structure and layout. Furthermore, the Dart plant in Corona meets a South Coast standard 0.8 lbs. less than the one proposed in Maricopa County. Given that example, the Department does not believe that the commenter's characterization of the Department's standard setting process is accurate.

Comment #24: Based on prior discussions between the parties, as AQD knows, WinCup has evaluated the technical feasibility of the proposed Section 303 standard independent of the legal shortcomings of the Rule. WinCup has provided numerous data sets to AQD demonstrating that, under current operating conditions, the pentane content of prepuff being fed to the molding machines varies from roughly 3.3 to 3.9% pentane. During the development of the proposed Rule, WinCup discussed with AQD the use of increased aging time as a method for driving down the pentane content of the pre-puff prior to molding. WinCup explained that there is a limit to the amount of bead aging possible before product quality becomes unacceptable.

WinCup has advised us of its belief that high density products, which make up approximately one third of production, need to be molded with beads that contain minimum pentane levels at or slightly above the proposed Section 303 standard. These findings were previously convened to AQD during the rule making process. AQD's failure to consider and analyze the extent to which product quality will be impaired by aging pre-puff is arbitrary and capricious.

Response #24: The Department recognizes that there is a limit to the amount of bead aging possible before product quality becomes unacceptable. However, the Department was aware the Dart Corona facility meets and has met a standard 0.8 lbs. less than the Rule 358 standard for several years. The Department has also observed block manufacturers updating equipment, changing to mid-range VOC beads, and installing controls. Based on this information, it is not unreasonable for the Department to believe that compliance with the Rule 358 standard is technically feasible. Therefore, the proposed standard is not arbitrary and capricious. Furthermore, since rule proposal, the Department has obtained additional information from Dart indicating the Corona plant manufactures products with a 4.2 pcf density that is very close to the high density product WinCup manufactures referenced in this comment. In prior conversations with Wincup Phoenix plant staff, the Department was informed that this product makes up almost all of the high density production described in this comment. In addition, data from another Wincup facility shows a product with more than 4.5 pcf density molded at 3.0% pentane. Wincup need only reach 2.9% pentane using a 90% efficient ECS or 2.8% pentane using an 85% efficient ECS.

Comment #25: Finally, because it has proposed an emission standard rather than simply specifying the application of RACT, AQD should provide a more specific description of the method of measuring compliance with the limit. As acknowledged in the RACT Analysis, the WinCup facility operates on a continuous basis, unlike block or shape manufacturers which operate a batch process. In a batch process, it is possible to follow a discreet package of raw material to a singular batch of product and thus do compliance sampling at one location from one product. In a continuous process, raw beads are constantly being expanded into various pre-puff densities and sent to the various molding machines.

The proposed 3.2 lb. standard is expressed in the form of lbs. VOC per 100 lbs of raw beads processed. To measure the remaining VOC content in the processed raw material one must follow its distribution through the system. On average, the facility processes 100 lbs. of raw beads in approximately 4-5 minutes and the processed material is conveyed into various cup molding lines. Also, portions of the original 100 lbs. of raw bead are expanded to differing densities. Thus, the specific VOC content of this processed material varies in accordance with the degree of pre-expansion and aging, and measurement of that content requires representative sampling as it exits the RACT-specified pre-molding enclosure across the post-enclosure lines. WinCup requests that sampling under the standard be clarified to reflect, and be consistent with, the nature of the cup manufacturing process.

Response #25: The Department will work with EPS stakeholders and EPA to develop a testing procedure specific to the EPS industry that explains Rule 358 compliance determinations and the application of the provisions of Rule 270--Performance Tests. The Department does not believe that the nature of the process, whether continuous or batch, affects the way compliance is determined in the rule. Emission standards are frequently expressed in standard units that may or may not coincide with the specific characteristics of the products being regulated. Industry sectors typically encompass a wide range of products with different sizes and shapes. Furthermore, the EPS samples pulled to

analyze for VOC content range from 0.3 to 1.5 grams per sample from blocks to the entire cup, which is frequently larger than the sample pulled from blocks.

During the rule development process, the Department clearly used the word "averaging" in draft rules whenever we considered allowing averaging among products. To support an averaging option, additional record keeping, calculation procedures, and monitoring provisions would also have to be added to the rule. Amending the rule to allow averaging for cup manufacturing would constitute a substantial difference from the notice of proposed rulemaking. Under A.R.S. 49-471.07.C, if the rule is substantially different from the proposed rule, the board of supervisors shall file a new notice of proposed rulemaking or a supplemental notice of proposed rulemaking. It is the Department's interpretation that each of WinCup's products must meet the cup standard.

Comment #26: Section 305 provides certain control performance requirements if "an ECS is required by this rule." It does not appear that Rule 358 expressly requires an ECS.

Response #26: The commenter is correct. Rule 358 does not expressly require an ECS. While the wording in other parts of the rule reflects this, we inadvertently did not make the needed change to Section 305. We plan to make the correction after Rule 358 is adopted, when the rule is reopened to make any needed adjustments, after a sufficient period of experience implementing the rule.

Comment #27: Section 305.1(b) contains an hourly average outlet concentration limit of 20 milligrams of VOC per dry standard cubic meter. VOC is identified as non-methane organic carbon. This is stricter than the EPA definition of VOC in Section 51.100 (see page numbered 140). The EPA definition of VOC should be used. EPA recognizes VOC as non-methane, non-ethane, organic carbon.

Response #27: Maricopa County uses EPA's definition of VOC. Ethane is not a VOC. VOC is not identified as non-methane organic carbon. Instead the rule states, "Express mass loading of VOC as milligrams of non-methane organic carbon." In order to total mass from VOC compounds with different molecular weights, the analytical results must be converted to equivalents of a standard unit of mass. For VOCs, this standard unit equivalent is non-methane organic carbon. Methane and ethane can be speciated in the test samples and subtracted prior to converting the data to non-methane organic carbon. Section 503.3 addresses the commenter's concern by specifically mentioning the test for ethane as well as methane.

Comment #28: Subsection 305.2 refers to a "pressure recorder that monitors the integrity of a permanent total-enclosure," which suggests that the pressure differential between the outside and inside of an enclosure is continuously monitored. [Our facility has] been trying to find such a device without success for several months. [Our] enclosure is huge by most standards for permanent total enclosures, and the EPA standard [as expressed in EPA Method 204] for these enclosures is involves a very small pressure differential (0.007 inches of water). These two factors require that a very precise and accurate device be used to measure the pressure differential across the enclosure walls. Since such devices do not appear to be available, we request that the last portion of subsection 305.2 beginning with ", or a pressure ..." be removed.

Response #28: Pressure measurement is one among several examples given in subsection 305.2 and is not specifically required by the Rule. However, Department staff has observed such a device that monitors an enclosure that is enclosed, in part, by walls made of flexible, VOC-impervious fabric in a Phoenix facility.

Comment #29: Subsection 307.1(b) of Rule 358 requires that raw EPS beads be stored "in closed, leak-free, labeled containers when not in use". We want to know if the container-bags in which the raw beads are delivered meet these requirements, assuming that the bag itself is re-sealable and both the exterior bag and the liner sack are intact.

Response #29: The container-bags that the raw beads were delivered in will meet the requirements of "closed, leak-free, labeled containers" if all of the following conditions are met. The bag itself is re-sealable, the liner sack and the exterior bag (or box) are both intact, and the inner liner is sealed so that no opening is visible between the outside of the liner and the contents within. The outer bag or box may have minor imperfections or tiny openings if the inner sack's outer surface doesn't bulge into any imperfection or opening.

Section 500: Monitoring and Records

Comment #30: In Section 502.1c, justify its requirement to record the weight of each EPS block. This seems like an unnecessary intrusion on business, further adding to existing recordkeeping requirements for no apparent reason.

Response #30: There are two reasons for requiring records of block weights. The first is to easily determine block density when a facility is making specialty products (i.e., products having densities <0.8 pcf or ≥2.0 pcf). When making specialty products, a facility is allowed to use beads having much greater VOC-content than their permit normally allows. An AQD investigator can easily determine block density from its weight and dimensions. EPS blocks are made in standardized sizes, or can be measured directly with a tape-measure. Without the provision, the standard in 301.1 could not be enforced.

The second reason is to estimate post-molding emission and emission rates. Block weight (and thus the block density) is a factor in the determination emission estimates for stored blocks and regrind emissions. Once emission rates as a function of density, initial VOC-content, storage time, and temperature are experimentally determined, the block weight data allows more accurate estimates of actual emissions during storage and regrinding.

Comment #31: Section 503 (Test Procedures)

The commenter is concerned that the requirements in this condition are either not relevant, or are too ambiguous to provide useful guidance for EPS facilities. Due to the unique operational and emissions characteristics of EPS manufacturing facilities, it is not apparent how to apply these general principles to design a practical capture efficiency test for the entire manufacturing process. The difficulties that molders have experienced in obtaining approval on protocols for similar testing requirements in other jurisdictions (e.g. SCAQMD Rule 1175) are evidence of that fact. Premier requests MCESD to either provide specific instructions as to which of the referenced test methods/submethods are applicable, and specifically how to apply them, or to modify this condition to allow testing in accordance with a protocol "approved by MCESD."

Response #31: This provision is a standard testing provision in all VOC rules. While this determination normally takes place on a case-by-case basis, the Control Officer will work with EPS facilities and EPA to develop a testing procedure specifically for EPS facilities.

Comment #32: Subsection 503.1 states that each year a source test is to be performed. Although the scope of the source test has not been defined, [we believe] that the test will cost a minimum of $10,000, not including the additional costs incurred for impacts to its operations. If the source testing is to include development of emission factors, the testing costs will be even higher. [Company management] believes that this is an unfair burden that is being selectively placed on the EPS industry and therefore respectfully requests that the testing requirement be every five years.

Response #32: EPA specified that new Rule 358 should require annual source testing for sources that choose to comply with the rule's standard using an ECS. Specifically, EPA points out that the EPS industry has neither a CTG nor AP-42 emissions factors. In addition, none of the industries that do have AP-42 emission factors, or that have a track-record of mutually comparable performance-test results across the US, are similar to the EPS industry. There is no nationally agreed upon protocol for performance-testing of the EPS industry. Until valid surrogate monitoring methods have been identified through a sufficient collection of data garnered from performance testing and the gathering of adjunct data that is accepted by Maricopa County and EPA, annual performance testing will be an essential means of monitoring compliance-status.

Finally, each EPS facility tends to be idiosyncratic in how it conducts the basic processing steps characteristic of its EPS category (cups, blocks, etc.). For example, from block facility to block facility, block molds vary in construction and how they are operated as to time, temperature, steam injection, and steam evacuation during the molding process. Moreover, at a facility the same machine may use different settings for each type of material processed. For example, settings for molding "one pound" material differ from settings for molding "pound and a half" material.

Comment #33: Subsection 503.1 states that the source test must be conducted between June 1 and August 31. There are a limited number of companies that can perform source tests, and the summer months is when most of them are scheduled. For example, many asphalt plants are shut down in the winter months, and commonly conduct their source tests in the summer when the plants are operating. Similarly, power plants operate seasonally, and typically conduct source tests when they operate at full load in the summer months. We do not understand the need to restrict the time of year when emissions are evaluated. We do not believe this type of limitation belongs in a rule. It places an unfair burden on the EPS industry, and may be impossible to comply with. Further, since all of the EPS manufacturers will have to conduct their tests around the same time, the cost for these tests will likely be higher. Since Maricopa County must review the test protocols and observe the tests, it will also place an unreasonable burden on Maricopa County. Accordingly, [we request] that references to the time of year when source tests are to be performed be removed from the rule.

Response #33: The Department has observed that a greater proportion of the initial raw bead VOC-content is emitted when processing is done in the warmest part of the year as compared to the rest of the year. For establishing permit conditions, an emission control system needs to be challenged to the same maximum degree as the system would be challenged in the course of a year's operation. In combination with the maximums for VOC-content and production rate desired by a facility's management, summer conditions maximize the challenge that the VOC in the raw materials makes on the ECS.

Comment #34: Section 503.9 Conforming Testing to Desired Production Characteristics: It will be necessary to define the term "each alternative operating scenario chosen". As the RACT analysis recognizes, compliance with the rule will be governed by a number of variables, including but not limited to raw material pentane content, aging time, and product density. It will not be feasible to predict, much less test, each possible combination of these variables. The wording of this condition is far too open ended, and could result in highly impractical testing requirements for molders.

Response #34: This rule provision is intended to refer back to the Section 301 standard that provides for 2 standards. The second standard in Section 301.2 is labeled specialty product alternative operating scenario. Section 503.9 simply indicates that the EPS facility must conduct source tests while operating in compliance with Section 301.1 and test again while producing products that comply with Section 301.2. If a facility does not make products that can only be made under the Section 301.2 standard, then only the source test demonstrating compliance with Section 301.1 is required.

Rule 270 "Source Tests" governs how tests are conducted. Section 403 of Rule 270 states that, "Performance tests shall be conducted under such conditions as the Control Officer shall specify to the plant operator based on representative performance of the source or facility." Premier expresses concern over how representative performance will be defined and the conditions for testing established. While this determination normally takes place on a case-by-case basis, the Control Officer will work with EPS facilities and EPA to develop a testing procedure specifically for EPS facilities.

Comment #35: The formulas presented in subsection 503.7 are too restrictive, do not allow for the use of emission factors used to determine total emissions generated during a particular process of manufacturing and provide no alternate method of determining various values. Furthermore, the wording in subsection 503.7 states that "ECS effectiveness shall be determined from the results of a testing protocol based on mass balance, calculated according to the following formulas." We feel that the subsection should be revised to clarify that both mass balance methods and direct measurements may be used; that emission factors can be used; and to allow for use of other recognized methods of determining capture and control.

Response #35: Method 204 is the primary test method used to determine whether an operation meets the criteria for a total enclosure and therefore can be assumed to have 100% capture if all of the exhaust gases from the enclosure are ducted to a control device. Method 204 would be used if a facility intends that all manufacturing of EPS foam be within a total enclosure. Currently, several of the EPS block-makers in Maricopa County do not totally enclose all EPS foam processing operations to comply with Rule 358. Therefore, compliance by those block-makers will be determined by source testing that uses a mass balance approach, outlined in Section 503.7 of the rule.

In regards to emission factors see the response to Comment 32. Should the results of extensive testing eventually produce emission factors for any particular subset of the EPS molding industry, e.g., block-molding, the County will revise Rule 358 to reflect this.

Direct measurement can be an alternative, if general agreement can be reached with the Department and with EPA should results from enough facilities become available that show that the method has adequate precision and repeatability. As of this writing we don't have data that has come from direct measurement. For example, currently the Department hasn't received any data from direct measurements of out-gassing from EPS blocks and is unaware of any from another AQD. The Department is aware that initial protocols proposing to test block off-gassing during storage are under review. Should the results of extensive testing eventually produce trusted sets of direct measurements for any particular subset of the EPS molding industry, the County will change Rule 358 to reflect this. Similarly, if other methods subsequently approved by EPA apply to EPS processing in Rule 358, we will change Rule 358 to reflect this.

Comment #36: The definitions in Section 503.7 should be more precise. For example, the proposed draft language states that "VOCp is the VOC content of the products made from the weighted raw beads." Suggested alternative language is as follows:

VOCp is the weighted average initial VOC content of the products (block, cup, ...) made from the raw beads processed.

Response #36: The Commenter erred in the citation of the definition. The definition states: "…. products made from the weighed raw beads", not "…the weighted raw beads"

Comment #37: The Section 503.7 calculation of percent control may not always be accurate. For example, [one facility's] RTO consumes natural gas to combust the VOC emitted from expanding the EPS beads. Some of this natural gas exits the stack as VOC. The percent control calculation assumes the natural gas VOC content exiting the stack is a negligible percent of the VOC total, which may not always be true. Suggested alternative language is as follows:

% Control =

where VOC_{ECS} is the VOC (lb/hr) measured in the gas stream entering the control (for example, RTO)

VOS_{St} is the VOC (lb/hr) measured exiting the control (for example, RTO)

VOS_{StNG} is the VOC (lb/hr) measured exiting the control (for example, RTO) that is from the natural gas used to heat the control

Note that Section 503.7 leaves out the term VOC_{StNG}

Response #37: Our performance test engineers are aware of methane slip and use the methods already referred to by the rule to detect organic compounds created by auxiliary combustion fuel used by the control device. The issue can be resolved by the facility, its tester, and the County test engineers in the course of reaching agreement on the test protocol. Because Maricopa County's definition of VOC follows the EPA definition, which excludes both methane and ethane, we see no need to revise the formula for calculating percent control. In addition, Section 503.3 addresses this issue by specifically mentioning the test for ethane as well as methane.

RACT ANALYSIS COMMENTS

Comment #38: Page 5, second paragraph. The word pellets should be changed to beads. The term EPS pellets should not be used in any description of the molded EPS bead industry.

Response #38: The word "pellet" was removed from the RACT Analysis. The word "bead" was substituted where applicable.

Comment #39: Page 5, third paragraph. When referring to loose fill, the word beads should be changed to raw material. Loose fill raw material can be some other shape than beads.

Response #39: We made the suggested change.

Comment #40: Page 12, second paragraph. The manufacturers' goal for prepuff density is to produce a density that results in the intended density of the finished product. The prepuff density and the final molded part density may not be exactly the same.

Response #40: We changed the statement to: "The beads are preexpanded at below the expected final density (usually there is less than 3 % increase in density), since puff tends to shrink slightly and thereby gain density through the process." In the next paragraph we now refer to prepuff density after aging is complete.

Comment #41: Page 12, last paragraph. Although it may be reasonable to conclude that "the lower the initial pentane content, the shorter the required aging time", I have not seen any data that this is always the case.

Response #41: We deleted the final sentence that made the quoted assertion.

Comment #42: Page 14, first paragraph. There is no data presented to be able to state there is no change in gross density of the molded product when compared to the gross density of the prepuff. This statement should be eliminated.

Response #42: We modified the statement to say: "Assuming that charging the mold with a volume of puff equal to the volume of the mold is standard practice, the average maximum diameter of the globules does not change and there is little or no change in the gross density of the molded product."

Comment #43: Page 16, third paragraph. There is no data to support a statement that concludes that a 3.6% bead-type will lose a smaller percent of its initial VOC than a bead-type containing 5.5% or more VOC made in the same machine at the same density.

Response #43: A BASF study of their EPS products' performance provided the supporting data for the assertion (Technical Bulletin N-840, February 1999). The test produced EPS shape products from the same mold with puff of the same (1.2 pcf) density expanded from batches of 2 different bead VOC contents. When the puff was aged the 6 hours, the shape made from 5.8 lbs VOC/ 100 lbs beads lost 45% of its initial VOC, while the shape made from 3.5 beads lost just 36% of its initial VOC. When the puff was aged 24 hours, the shape made with the 5.8 lbs VOC/ 100 lbs. bead lost 61% of its VOC, while the shape made from the 3.5 beads lost just 47% of its VOC.

For blocks at a 0.9 pcf density made from puff aged 24 hours, the blocks made from 6.1 lbs and 5.5 lbs VOC/100 lbs beads (same bead model, but not the same lot) had lost 51% and 54% of their initial VOC content while the block made from 3.5% beads had lost 47%. (When the puff made from the 3.5 block-making beads was aged just 6 hours, it lost 41% of its VOC.)

These results for 3.5 beads can be compared with the results of another experiment by a different bead manufacturer. Puff from beads containing 6.7 lbs VOC/ 100 lbs was expanded to a density of 1.18 pcf and aged for 24 hours. This produced a block with 1.59 lbs VOC/ 100 lbs, a loss of 76%. When a different batch of the same bead model that contained 6.2 lbs VOC/ 100 lbs was made into 0.93 pcf puff and aged 24 hours, it produced a block with 2.04 lbs VOC/ 100 lbs. This is 67% below the initial bead VOC content.

Comment #44: Page 20 6.1.1.1 The aging of a molded product to its final use is a function of water removal and not pentane diffusion. Therefore some of this statement is not correct.

Response #44: There are three reasons to store EPS blocks after molding. The first is to allow the hot, soft polymer to cool and become rigid. The second is to allow enough time for water within the block to evaporate and the water vapor to become so diluted with air that it cannot recondense within the block to prepare the block for cutting or other machining. The third is to allow the combustible blowing agent, pentane, to escape – eventually leaving little pentane within the foam-block so that the fire retardant chemical(s) built into the EPS can be effective. This will allow construction boards made from the block to meet rigorous fire-safety tests and qualify the boards for use in structures.

Comment #45: Page 20 6.1.1.1 To make a statement that the lower VOC content material is a better purchase can be completely false. Low VOC materials are more difficult to process and therefore can result in more scrap generation and thus increased costs.

Response #45: We qualified the statement with the words "with equivalent performance." Equivalent performance implies that processing outcomes are the same.

12. Any other matters prescribed by statute that are applicable to the specific department or to any specific rules or class of rules:

None

13. Incorporations by reference and their location in the rules:

New incorporations by reference	**Location**
Bay Area Air Quality Management District, BAAQMD Manual of Procedures, Method 45, Volume III	Section 504.5
South Coast Air Quality Management, AQMD Method 306-91, 1993 revision	Section 504.6
EPA Test Method 204 a,b,c,d,e and f 40 C.F.R.51, Appendix M	Section 504.4
ASTM International ASTM Method C303-02	Section 504.8

Incorporations by reference updated to 7/1/03	**Location**
40 C.F.R. 60, Appendix A	Section 504

14. Was this rule previously made as an emergency rule?

No

15. The full text of the rule follows:

RULE 358

POLYSTYRENE FOAM OPERATIONS

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RULE 358

POLYSTYRENE FOAM OPERATIONS

SECTION 100 – GENERAL

101 PURPOSE: The purpose of this rule is to limit the emissions of volatile organic compounds (VOCs) from the manufacturing of expanded-polystyrene products.

102 APPLICABILITY: This rule applies to any facility that expands, ages, or molds expandable polystyrene (EPS).

SECTION 200 – DEFINITIONS: See Rule 100 (General Provisions And Definitions) of these rules for definitions of terms that are used but not specifically defined in this rule. For the purpose of this rule, the following definitions shall apply:

201 BEAD-LOT and BEAD-LOT IDENTIFIER – A specific selection of a specific quantity of expandable polystyrene material, all portions of which typically share similar properties. This selected material has been tested in accordance with standard quality-control procedures and is traceable to the time and date on which it was packaged. Traceability is enabled by a bead lot identifier or lot number, which is a unique numeric (or alphanumeric) string that is permanently coupled with the selected material. The lot number always appears on one or more formal transfer/receipt documents retained by both the seller and the buyer, and identifies the material's plant of manufacture as well as the date that it was packaged.

202 BLOCK (EPS FOAM BLOCK) – A block-shaped solid made of EPS foam that was molded as a unit. Typically, a block's depth and width each exceed 23 inches (0.6 m) and a length exceeding 95 inches (2.4 m).

203 BLOWING AGENT – Any substance that, alone or in conjunction with other substances, is capable of producing a cellular (foam) structure in a polymeric material by inflation.

204 CUP MOLDING – The process of making cups, bowls, and similar containers by molding expanded polystyrene globules (prepuff).

205 DAY - Any 24-hour period beginning at 12:00 AM, midnight.

206 EMISSION CONTROL SYSTEM (ECS) – A system for reducing emissions of volatile organic compounds, consisting of a capture system (e.g., enclosures, hoods, and ductwork) and control device(s). An ECS may also include gas conditioning equipment such as condensers or prefilters.

207 EPS BEADS (EXPANDABLE POLYSTYRENE BEADS) – Polystyrene beads, particles, or granules, usually less than one-twelfth inch in diameter, that are formulated with a blowing agent (typically 3.5% to 7% of bead weight). When subjected to prescribed heating in an expansion system, the beads puff up, expanding many times their original volume into low density foam globules (called "prepuff" or "puff") from which a variety of EPS foam products are molded.

208 **EPS FOAM (EXPANDED POLYSTYRENE FOAM) –** A lightweight, naturally white, foam material, made of polystyrene, from which a variety of common items are made, such as ice-chests, insulation board, protective packaging, and single-use cups.

209 **LOOSE FILL –** Small, expanded polystyrene forms produced in a variety of shapes that are used as packing material or as stuffing in furnishings. These foam products typically have a density below 6/10 of a pound per cubic foot (pcf).

210 **NONPRECURSOR ORGANIC COMPOUND –** Any of the organic compounds that have been designated by the EPA as "exempt" (having negligible photochemical reactivity). A listing of the compounds is found in Rule 100 of these rules and regulations.

211 **POLYSTYRENE –** Any grade, class, or type of thermoplastic polymer, alloy, or blend that is composed of at least 80% polymerized styrene by weight.

212 **PREPUFF or PUFF** – Expanded polystyrene globules, prior to molding, formed from EPS beads/granules that have been processed in an expander. No grind/regrind material (i.e., expanded EPS that has been through a grinder) or material within a grinding system is considered to be prepuff.

213 **SHAPE –** An object made out of EPS that has been molded into a shape other than that of a block, cup, or bowl.

214 **SPECIALTY BLOCK-PRODUCTS** – For the purposes of this rule, a specialty block product is an EPS block or block-derivative (e.g., board, architectural form, etc.) that meets either of the following criteria:

214.1 Has a density of 2.0 pounds per cubic foot or greater, as determined by ASTM Method #C303; or

214.2 Has a density less than 0.8 pounds per cubic foot as determined by ASTM Method #C303.

215 **VOLATILE ORGANIC COMPOUND (VOC) –** Any organic compound that participates in photochemical reactions, except nonprecursor organic compounds.

216 **VOC CONTENT OF RAW EPS –** For the purposes of this rule, there are 3 different expressions for stating the VOC content of raw EPS beads/granules. Each of these expressions must be made in terms of either the number of pounds of VOC per 100 pounds of beads or the percentage of overall weight (including the VOC weight) that the incorporated VOC constitutes. The percent value shall be expressed with a precision of no less than the nearest tenth of one percent, which is equivalent to expressing the same number value in pounds VOC per 100 lbs. beads, to the nearest tenth of a pound. The acceptable expressions are:

216.1 **Manufacturer-Certified Bead-Lot (MCBL) VOC-Content** – A document such as a standard Certificate Of Analysis that numerically presents an EPS bead-lot's VOC content and must contain all of the following elements:

a. The VOC content printed or written on a paper document by the bead manufacturer, after the manufacturer has had the bead-lot tested to determine the lot's percent VOC, before shipping from the manufacturer; and

b. The manufacturer's name and the bead-lot, identified on the paper document with the appropriate bead-lot identifier; and

c. The signature of an officer of the manufacturing facility or the signature of an officer's designee, previously designated in writing by such an officer.

216.2 **Post-Manufacture Laboratory-tested (PMLT) VOC-Content:** The results of a laboratory test determining the VOC content of a representative sampling of an intermediate or finished expanded polystyrene-product, or such a test of raw beads any time after their MCBL VOC content has been assigned.

216.3 **ISO-Certified Maximum Bead-Model (IMBM) VOC Content:** A numerical value that represents the upper limit of a particular bead-model's VOC-content, which has been:

a. Initially stipulated by the bead-model's manufacturer in a document that gives the bead-model's unique identifier, and

b. Subsequently certified for accuracy by the International Standards Organization (ISO).

SECTION 300 – STANDARDS:

301 **BLOCK MAKERS**: An owner and/or operator of an EPS block-making facility shall comply with subsection 301.1 and, if applicable, subsection 301.2 of this rule.

301.1 Limit the sum of both the VOC that escaped to atmosphere and the residual VOC in the resulting blocks at the time they are released from the molding machine to not more than 3.0 pounds for every 100 pounds of raw beads processed.

301.2 **Specialty Products Alternative Operating Scenario:** When producing specialty block-products solely from raw EPS beads that exceed a VOC-content of 5.5 percent by weight, an owner and/or operator may choose the standard in subsection 301.2(a) by which to comply with this rule, but only if the requirements in subsections 301.2(b), and 301.2(c) are met.

a. Limit the sum of both the VOC that escaped to atmosphere and the residual VOC in the resulting blocks at the time they are released from the molding machine to not more than 3.9 pounds for every 100 pounds of raw beads processed (3.9 lbs/100#), and

b. Taking into account the total weight of all beads processed each year, limit the portion of that weight that is processed under the 3.9 lbs./100# standard to the percent allowed each year by Table I.

TABLE I

ANNUAL PERCENTAGE LIMITS FOR SPECIALTY PRODUCTS MADE UNDER THE SUBSECTION 301.2a STANDARD

Column A CALENDAR YEAR OF COLUMN B LIMIT	Column B Maximum Percent Of All Raw-Beads Processed Each Year That Are Allowed To Be Processed Under The 3.9 Lb/100# Standard For Specialty Products Only
2006	10.0
2007	9.0
2008	8.0
2009	7.0
2010	6.0
2011 and continuing	5.0

c. The proportion of annual raw-material throughput that is produced under the section 301.2(a) standard shall be calculated and recorded according to Section 502.1(d).

302 **SHAPE MAKERS:** An owner and/or operator of an EPS shape-making facility shall limit the sum of the VOC that escaped to atmosphere and the residual VOC in the resulting shapes to 2.7 pounds for every 100 pounds of raw beads processed.

303 **CUP MAKERS**: An owner and/or operator of an EPS cup-making facility shall limit the sum of the VOC that escaped to atmosphere and the residual VOC in the resulting cups to 3.2 pounds for every 100 pounds of raw beads processed.

304 **LOOSE FILL MAKERS:** An owner and/or operator of a facility that makes expanded polystyrene loose fill shall limit the sum of both the VOC that escaped to atmosphere plus the residual VOC in the finished loose fill (measured right after the final curing process) to not more than 2.4 pounds for every 100 pounds of raw EPS materials processed into finished loose fill.

305 **PERFORMANCE OF ECS CONTROLLING VOC EMISSIONS:** If an ECS is required by this rule, comply with subsections 305.1, 305.2, and 305.3 of this rule.

305.1 The control device (abatement subsystem) of such ECS shall comply with either subsection 305.1(a) or subsection 305.1(b) of this rule.

a. Reduce the weight of VOC-as-carbon that enters the control device by at least 94 percent; or

b. Maintain an hourly average outlet concentration of VOC below 20 milligrams per dry standard cubic meter. Express mass loading of VOC as milligrams of non-methane organic carbon.

305.2 Each ECS that is operated in order to comply with this rule shall be equipped with monitoring devices capable of demonstrating that the ECS is operating in a manner that assures compliance with this rule. The monitoring devices shall be installed, calibrated, maintained, and operated according to their manufacturers' instructions and the O&M Plan. Typically, such devices provide

temperature, pressure, flow-rate, or other indicator(s) of proper ECS function (such as a continuous temperature recorder that monitors an oxidizer's combustion chamber or a condenser's outlet duct, or a pressure recorder that monitors the integrity of a permanent total-enclosure, etc.).

305.3 Records shall be kept according to Section 502.3 of this rule.

306 ECS OPERATION AND MAINTENANCE (O&M) PLANS:

306.1 An owner and/or operator shall provide, implement, and maintain an O&M Plan for each ECS required by this rule. The O&M Plan shall include the monitoring device(s) associated with the ECS.

306.2 The owner and/or operator shall submit to the Control Officer for approval the O&M Plan of each ECS, with its associated monitoring device(s), that is used according to Sections 301.1, 301.2, 302, 303, or 304 of this rule. Also include in such O&M Plans:

a. Procedures for collecting and recording required data and other information in a form approved by the Control Officer, which shall include data collected through the O&M Plan and through the monitoring of key system operating parameters; and

b. Procedures and schedules for preventive and corrective maintenance performed for the purpose of maintaining the emission control system in proper operating condition.

306.3 An owner and/or operator of an EPS facility must comply with all O&M Plans that the owner and/or operator has submitted for approval but which have not yet been approved, unless notified otherwise by the Control Officer in writing.

307 VOC CONTAINMENT, IDENTIFICATION, AND DISPOSAL:

307.1 Contain VOC-Emitting Material:

a. When they are not in use, store all fresh and used non-EPS VOC-containing material in closed, leak-free containers that are labeled according to subsection 307.4. Such materials include but are not limited to cleaning solvents, inks, coatings, thinners, and their residues including residues on rags; and

b. Store raw EPS beads in closed, leak-free, labeled containers when not in use.

307.2 Materials addressed in Section 307.1 of this rule may be placed in an enclosure ducted solely to an ECS that is approved by the Control Officer, instead of in closed containers.

307.3 The owner and/or operator must implement procedures to minimize spills of VOC-containing materials described in subsection 307.1(a) of this rule, during their handling and transfer to or from containers, vats, enclosed systems, waste receptacles, and other equipment, whether the material is fresh, used, or waste.

307.4 Identification and Labeling:

a. Containers used for initial, intermediate, or final storage of VOC-containing materials addressed in subsection 307.1 of this rule shall be clearly labeled with their contents.

b. Content-labeling done according to the requirements of federal hazardous waste (RCRA) or occupational safety (OSHA) statutes and codes meets the requirements in subsection 307.4(a) of this rule.

308 EXEMPTION:

308.1 Exemption from Sections 301.1 through 306.3: An owner and/or operator of a facility is exempt from the requirements of Sections 301.1 through 306.3 of this rule if the total VOC content of all raw EPS material processed by the facility is, in each calendar year, below 50 tons (100,000 lbs.) and, in each calendar month, below 12,000 pounds.

308.2 Burden of Proof: A person claiming any exemption from this rule or from a provision of this rule shall provide adequate records to verify and maintain any exemption. These may include records of raw material used, laboratory analyses, technical data sheets, and/or performance test results.

SECTION 400 - ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE: A person or owner/operator of a facility that is subject to Sections 301, 302, 303, or 304 of this rule shall comply with the following increments of progress:

401.1 By July 20, 2005, the owner and/or operator shall comply with Section 502 through 502.2c of this rule;

401.2 By August 20, 2005, the owner and/or operator either must submit an application or have been issued a revised permit that addresses the installation and operation of the equipment to be used to achieve compliance with this rule; also, comply with Sections 307.1 through 307.4 of this rule ;

401.3 By April 20, 2006, the owner and/or operator must complete the installation of all equipment required to meet the provisions of this rule, and also comply with all O&M Plan requirements in Section 306 , and Section 502.3; and

401.4 By October 20, 2006, the owner and/or operator must comply with the applicable standards in Sections 301, 302, 303, 304, and 305 of this rule.

SECTION 500 - MONITORING AND RECORDS

501 RECORDS:

501.1 **General:** Records shall be kept complete and up-to-date, in a consistent and legible format.

501.2 **Retention:** Records required by this rule shall be retained for at least 5 years.

501.3 **Use of Other Records:** Records that are kept by an EPS facility for other agencies or purposes may be submitted to the Control Officer to meet the record requirements of this rule, provided such records contain the necessary information according to Section 502 of this rule.

502 RECORDKEEPING SPECIFICS:

502.1 **Tracking EPS Beads**: Effective July 20, 2005, a person subject to this rule shall comply with the following requirements, as applicable.

a. **Lot ID and VOC Content:** Prior to expanding any part of a bead-lot, an owner and/or operator shall obtain and retain an original or copy of the VOC-content, as defined in Section 217 of this rule, for each separate lot-number/identifier of beads received.

b. **Total Expanded, By Lot and Date:** Each day that raw EPS material is expanded in a facility's expander, an owner and/or operator shall record the amount of each bead-lot expanded and its corresponding lot number/identifier.

c. **Block-makers:** Each day that blocks are made, record the approximate weight of each newly molded block, measured to the nearest 2 pounds.

d. **Specialty Products Subject to Section 301.2(a):** An EPS-block facility owner and/or operator making specialty products under Section 301.2(a) shall:

(1) Maintain a log indicating when the facility is operating under the specialty-products alternative operating scenario; and

(2) Each month calculate the percent of total EPS raw material used during the current calendar year that specialty products, made under section 301.2(a), constitute; enter the calculations and results in the log.

502.2 **Lists of Non-EPS VOC-Containing Materials**: Non-EPS materials may include, but are not limited to, the following categories: inks, coatings, adhesives, reducers, thinners, solvents, cleaning materials, additives, spray-cans, sprayed lubricants, and any other VOC-containing materials that are not EPS.

a. An owner and/or operator shall maintain a current list of non-EPS materials, containing VOC, used at the facility. A complete and ordered assemblage of the required data meets the requirements for a list.

b. An owner and/or operator shall express VOC content of non-EPS material in one of the following three forms:

(1) Pounds VOC per gallon (or grams VOC per liter), or

(2) Fractional pounds of VOC per lb. material (or grams per kilogram), or

(3) The percent VOC by weight along with the specific gravity or density (2 numbers are required for each entry).

c. By the end of the following month, an owner and/or operator shall record the amount and type of each non-EPS material, containing VOC that was used during each month.

502.3 **Records Of ECS Operation And Monitoring:** On a daily basis, the owner and/or operator of a facility that operates an ECS to comply with this rule shall record key system operating parameters such as temperature, flow rate, pressure, and/or VOC-concentration, etc.

503 TEST PROCEDURES: An owner and/or operator of an EPS facility will be in violation of this rule if the VOC emissions, measured by any of the referenced test methods specified in this Section 503 and listed in Section 504 of this rule, do not comply with the applicable standards included by Sections 301 through 305 of this rule.

503.1 Each year between June 1 and August 31, an owner and/or operator shall conduct an annual performance test on each ECS used to meet a standard in this Rule 358, using the test methods

designated by subsections 503.2 through 503.7 and incorporated by reference in Section 504 of this rule.

503.2 An owner and/or operator shall perform the measurement of airflow and gas flow into and out of the ECS by performing EPA Method 2, referenced in Section 504.1 of this rule.

503.3 An owner and/or operator shall determine the concentration of methane and ethane emissions by performing EPA Method 18, referenced in Section 504.2, or Method 25 (and its submethods) referenced in Section 504.3 of this rule.

503.4 An owner and/or operator shall determine the control efficiency of the VOC control device (abatement subsystem) of an ECS by performing EPA Method 25 (and its submethods), referenced in Section 504.3 of this rule.

503.5 An owner and/or operator shall determine the efficiency of a capture system according to both EPA Method 204 (and its submethods) referenced in Section 504.4 and the EPA guidance document referenced in Section 504.7 of this rule.

503.6 An owner and/or operator shall determine the concentration of total volatile organic carbon content in polymeric materials by performing Bay Area Quality Management District (BAAQMD) Method 45 as referenced in Section 504.5 of this rule or by performing South Coast Air Quality Management District (SCAQMD) Method 306-91, 1993 revision, as referenced in Section 504.6.

503.7 **Determination of ECS Effectiveness:** ECS effectiveness shall be determined from the results of a testing protocol based on mass balance, calculated according to the following formulas:

$$\% \text{ CAPTURE} = \frac{VOC_{ECS}}{VOC_I - VOC_P} \times 100$$

$$\% \text{ CONTROL} = \frac{VOC_{ECS} - VOC_{St}}{VOC_{ECS}} \times 100$$

$$\% \text{ EMITTED} = \frac{VOC_I + VOC_{St} - VOC_P - VOC_{ECS}}{VOC_I - VOC_P} \times 100$$

$$\% \text{ OVERALL (Capture+Control)} = \frac{VOC_{ECS}}{VOC_I - VOC_P} \times \frac{VOC_{ECS} - VOC_{St}}{VOC_{ECS}} \times 100$$

Where:

VOC_I is the VOC input in the form of the VOC content of a weighed mass of raw beads.

VOC_P is the VOC content of the products made from the weighed raw beads.

VOC_{ECS} is the VOC measured in the air entering the ECS.

VOC_{St} is the VOC remaining in the gas stream(s) emerging from the ECS during production.

503.8 **Determination of Product Density:** The ASTM Method #C303-02 referenced in Section 504.8 shall be used to determine the density of EPS foam blocks and block-derivatives.

503.9 **Conforming Testing to Desired Production Characteristics:** The owner and/or operator of an EPS facility must, through performance testing, demonstrate compliance with each alternative operating scenario chosen.

504 **TEST METHODS ADOPTED BY REFERENCE**: The EPA test methods as they exist in the Code of Federal Regulations (C.F.R.) on July 1, 2004, are adopted by reference. These adoptions by reference include no future editions or amendments. Copies of test methods referenced in this Section are available at the Maricopa County Environmental Services Department, 1001 North Central Avenue, Phoenix, AZ, 85004-1942. The other test methods from Bay Area Air Quality Management District and South Coast Air Quality Management District listed herein are also adopted by reference, each having paired with it a specific date that identifies the particular version/revision of the method that is adopted by reference.

504.1 EPA Reference Method 2 ("Determination of Stack Gas Velocity and Volumetric Flow Rate"), 2a ("Direct Measurement of Gas Volume Through Pipes and Small Ducts"), 2c ("Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts"), and 2d ("Measurement of Gas Volumetric Flow Rates in Small Pipes and Ducts"), (40 C.F.R. 60, Appendix A).

504.2 EPA Reference Method 18 ("Measurement of Gaseous Organic Compound Emissions by Gas Chromatography"), (40 C.F.R. 60, Appendix A).

504.3 EPA Reference Method 25 ("Determination of Total Gaseous Nonmethane Organic Emissions as Carbon"), (40 C.F.R. 60, Appendix A).

504.4 EPA Reference Method 204 ("Criteria for Determining Capture Efficiency"), 204A, 204B, 204C, 204D ("Volatile Organic Compounds Emissions in Uncaptured Stream from Temporary Total Enclosure"), 204E ("Volatile Organic Compounds Emissions in Uncaptured Stream from Building Enclosure"), and 204 F ("Volatile Organic Compounds Content in Liquid Input Stream {Distillation Approach}") (40 C.F.R. 51, Appendix M).

504.5 BAAQMD Method 45 ("Determination of Butanes and Pentanes in Polymeric Materials"), (BAAQMD Manual of Procedures, Volume III, January 19, 2000).

504.6 SCAQMD Method 306-91, February 1993 revision ("Analysis of Pentanes In Expandable Styrene Polymers"), Applied Science & Technology Division – Laboratory Services Branch.

504.7 EPA Guidance Document, "Guidelines for Determining Capture Efficiency", January 9, 1995.

504.8 American Society of Testing Materials, ASTM Method #C303-02 (Standard Test Method for Dimensions and Density of Preformed Block and Broad-Type Thermal Insulation), 2002.

NOTICE OF FINAL RULEMAKING

Pima County Air Quality Control Regulations

Pima County Code

Title 17 – Air Quality Control

Chapter 4 General Provisions

[M05-113]

PREAMBLE

1. Sections Affected **Rulemaking Action**

Pima County Code (PCC) 17.04.340	Amend
PCC 17.04.410	Amend

2. Statutory authority for the rulemaking:

Arizona Revised Statutes (A.R.S.) § 49-112 – County Regulations; standards

A.R.S. Title 49, Chapter 3, Article 3. County Air Pollution Control

A.R.S.§ 49.471.08 – Expedited Rulemaking

A.R.S. § 49.479 – Rules; hearing

3. The effective date of the rules:

May 19. 2005

4. List of all previous notices appearing in the register addressing the proposed rule or ordinance and a concise explanatory statement.

Notice of Expedited Rulemaking, Arizona Administrative Register (AAR) 11: 9, page 872 – 895, February 25, 2005.

Notice of Rulemaking Docket Opening: AAR 10:39, page 3899, September 24, 2004.

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name:	Jean Parkinson Program Coordinator
Address:	Pima County DEQ 150 W. Congress Tucson, AZ 85701
Telephone:	(520) 740-3978
Fax:	(520) 882-7709

E-mail: Jean.Parkinson@deq.pima.gov

6. An explanation of the rule, including the Control Officer's reasons for initiating the rule:

17.04.340 Summary: In this rulemaking, the Pima Department of Environmental Quality (PDEQ) has amended the definition of "major source" by deleting the phrase "but only with respect to those air pollutants that have been regulated for that category" in Pima County Code (PCC) Chapter 17.04.340 (125) (c) (xxvii). This change will ensure that the definition of "major source" fully meets 40 CFR 70 and Title V of the Clean Air Act. The amended definition will be submitted to the Environmental Protection Agency (EPA) as a revision to Arizona's Title V Program, as explained in EPA's approval of PDEQ's Title V Program (66 FR 63177, December 5, 2001).

Additional typographical and grammatical corrections to other definitions were included in this rulemaking to conform to, and directly reflect federal and state rule or law. In addition, new definitions are included to conform PDEQ's words and phrases to ADEQ's list of definitions. The list of definitions was renumbered to reflect the addition of the new words or phrases. The definitions that were changed include the following:

Actual emissions	Amend
Adverse impact on visibility	Amend
Alternative method	Amend
Billable permit action	New
Categorical sources	Amend
CEM	New
Coal	Amend
Clean coal technology	New
Clean coal technology demonstration project	New
Temporary clean coal technology demonstration project	New
Dispersion technique	Amend
Effluent	Amend
Electric utility steam generating unit	New
Emissions unit	Amend
Enforceable	Amend
Equivalent method	Amend
Fuel	Amend
Fuel oil	New
Fugitive emission	Amend
Itemized bill	New
Land stripping	Amend
Lime kiln	Amend
Lime plant	Amend
Lowest achievable emission rate	Amend
Major modification	Amend
Major source	Amend
Major source threshold	New
Material permit condition	Amend
Maximum achievable control technology	Amend
Miscellaneous metal parts and products	Amend
NAICS	New
Net emissions increase	Amend
Nonpoint source	Amend
Particulate matter emissions	Amend
Permit processing time	New
$PM_{2.5}$	New
PM_{10} emissions	Amend
Pollution control project	Amend
Portable source	Amend
Primary ambient air quality standards	Amend
Process source	Amend
Proposed final permit	Amend
Reactivation of very clean coal-fired electric utility	New
Re-powering	New
Representative actual annual emissions	New
Resource recovery project	Amend
Responsible official	Amend
Secondary emissions	Amend
Significance levels	Amend
Small source	Amend
Stack in existence	Amend
Stationary source	Amend

Synthetic minor	New
Temporary source	Amend
Trivial activities	New
Vapor recovery/disposal system	Amend
Visibility impairment	Amend
Volatile organic compounds	Amend
Wood waste burner	Amend

Section by Section Analysis

PCC 17.04.340	Amend	Updates definitions to conform to ADEQ and EPA changes
PCC 17.04.410	Amend	Updates reference to A.R.S. §§ 49-471.06 through 49-471.12

§17.04.340 (Words, Phrases, and Terms) Summary: PDEQ has amended the definition of "major source" by deleting the phrase "but only with respect to those air pollutants that have been regulated for that category." This change will ensure that the definition of "major source" fully meets 40 CFR Part 70. The amended definition will be submitted to EPA as a revision to Pima County's Title V Program, as explained in EPA's full approval of PDEQ's Title V Program (66 FR 63175, December 5, 2001).

The other definitions listed above are added or revised to conform to changes that ADEQ has finalized. The list of definitions was renumbered due to the addition of new words or phrases. The adopted definitions are identical in wording and grammar to the ADEQ definitions. The revised or additional phrases for this rulemaking do not alter the sense, meaning, or effect of the federal or state rule.

§17.04.410 (Public Participation in Rulemaking) Summary: The provisions in 17.04.410 (Public Participation in Rulemaking) have been updated to incorporate the revisions to the Arizona Revised Statutes Title 49, Chapter 3, Article 3, and Section 471, which became effective on January 1, 2002.

Statutory Authority: A.R.S §49-471.08 – Expedited rule or Ordinance making – provides a statutory mechanism for a declaration of an expedited process if the rulemaking is a conforming change to directly reflect federal or state rule or law.

Background: Periodically the Pima County Department of Environmental Quality updates and conforms to the Arizona Administrative Code and the Code of Federal Regulations in an effort to achieve consistency and accuracy in Air Quality Regulations for Pima County. The last conforming changes to Title 17 were in 2004.

7. Reference to any study relevant to the rule that the Control Officer reviewed and either relied or did or did not rely on in its evaluation of or justification for the rule, where the public may review each study, all data underlying each study, and any analysis of each study and other supporting material:

No studies were reviewed in reference to this rulemaking action.

8. The preliminary summary of the economic, small business, and consumer impact:

PDEQ believes that the change to the "major source" definition in 17.04.340 (125) could have an economic effect on some sources by causing them to be classified as major sources when they would not otherwise be. Certain facilities may need to re-estimate their release of fugitive emissions for non-hazardous air pollutants to determine if they are subject to Title V operating requirements. These rules impose no additional costs on the regulated community, small businesses, political subdivisions, or members of the public. Costs to PDEQ are those that may accrue for implementation and enforcement of the new rules. Although there were some small incremental costs due to this expedited rulemaking, PDEQ does not intend to hire any additional employees to implement or enforce these rules. These revisions should not have an economic impact on businesses in Pima County, and should not impose additional costs on the regulated community, small businesses, political subdivisions, and members of the public beyond that already incurred by reason of Federal or State law. In addition, Pima County is updating rules to conform to the Arizona Administrative Code and recent rule amendments finalized by the Arizona Department of Environmental Quality and EPA. These revisions should have not have an economic impact on Pima County businesses beyond that already incurred by reason of State and/or Federal law.

9. A description of the changes between the "Notice of Expedited Rulemaking," including supplemental notices, and final rules (if applicable):

Section 17.04.340 was renumbered due to errors in numbering published in the AAR on February 25, 2005, to indicate a total of 251 definitions.

Definition "Actual emissions" #4 (c) and (d): Delete underlining of "For any emissions unit"

Definition "Alternative method" #22: Underline 17.12.045.D and change .D to (D)

Definition "Fuel oil" # 93 – Underlined all text to indicate a new definition being added.

Definition "Lowest achievable emission rate" #125 (a) and (b): Underline "the" after ~~such~~

Definition "Major source" #127(c)xxii.: Underlined more than after ~~exceeding~~

Definition "Maximum Achievable control technology" #132(d): Added space after ; before or

In addition, numerous renumbered definitions were not properly underlined to indicate a change in number, in the previous AAR publication , which include: 81, 82, 91, 92, 93, 94, 171, 172, 183, 201, 202, 203, 204, and 233.

Definitions # 162, 163, 165, 166, 167, 168 were altered to indicate "no change" to the text.

10. A summary of the comments made regarding the rule and the agency response to them:

None

11. Any other matters prescribed by the statute that are applicable to the specific agency or to any specific rule or class of rules:

None

12. Incorporations by reference and their location in the rules:

All referenced incorporations provided in the text of the rule or ordinance are available for review at the Pima County Department of Environmental Quality. The state statutes: Arizona Revised Statutes, Title 49, Chapter 3 are available at the PDEQ office or at: http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp.

The federal regulations are available at the PDEQ office or at: http://www.ecfr.gpoaccess.gov

13. Were the rules previously made as emergency rules?

No. These rules were previously published as "Expedited," in accordance with A.R.S. § 49-471.08 (A).

14. The full text of the rule follows:

Chapter 17.04 GENERAL PROVISIONS

Sections:

Article I. Preamble.
17.04.010 Declaration of policy.
No Change

17.04.020 Purpose.
No Change

17.04.030 Authority.
No Change

Article II. Jurisdiction.
17.04.040 General applicability.
No Change

17.04.050 State and/or ~~county~~ County.
No Change

17.04.060 Limitations.
No Change

Article III. Incorporated Materials.
17.04.070 Incorporated Materials.
No Change

Article IV. Administration.
17.04.080 Air quality control district.
No Change

17.04.090 Executive head.
No Change

17.04.100 Governing body.
No Change

Article V. Advisory Council.
17.04.110 Establishment.
No Change

17.04.120 Composition.
No Change

17.04.130 Terms - Nominations.
No Change

17.04.140 Function.
No Change

17.04.160 Meetings - Special studies - Hearings.
No Change

17.04.170 Compensation - Absences.
No Change

Article VI. Hearing Board.
17.04.180 Establishment.
No Change

17.04.190 Composition.
No Change

17.04.200 Terms - Nominations.
No Change

17.04.210 Functions.
No Change

17.04.220 Officers - Procedures.
No Change

17.04.230 Meetings - Hearings.
No Change

17.04.240 Compensation - Absences.
No Change
17.04.250 Decisions of hearing board; subpoenas; effective date.
No Change

17.04.260 Judicial review.
No Change

Article VII. Legal Severability.

17.04.270 Severability clause.

No Change

Article VIII. Interpretations.

17.04.280 Format.

No Change

17.04.290 Heading and special type.

No Change

17.04.300 Use of number and gender.

No Change

17.04.310 Copies.

No Change

17.04.320 Effective date.

No Change

17.04.330 Adoptions by reference.

No Change

Article IX. Definitions and Meanings.

17.04.340 Words, phrases, and terms.

Words, phrases, and terms used in this Title shall have the following meanings except where any narrative portion specifically indicates otherwise:

A. Definitions.

1. "Acid mist" - No Change
2. “Act” - No Change
3. “Activity” – No Change
4. "Actual emissions" means the actual rate of emissions of an air pollutant from an emissions unit, as determined in accordance with paragraphs a through c.
   a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period ~~which~~ that precedes the particular date and which is representative of normal source operation. The control officer may allow the use of a different time period upon a demonstration that it is more representative of normal source operation. Actual emissions shall be calculated using the unit’s actual operating hours, production rates, and types of materials processed, stored or combusted during the selected time period.
   b. If there is inadequate information to determine actual historic emissions (e.g., the source has only been operating for 6 months), the control officer may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
   c. For any emissions unit at a Class I source, other than an electric utility steam generating unit in subsection (e), ~~which~~ that has not begun normal operations on the particular date, actual emissions shall equal the unit’s potential to emit ~~of the unit~~ on that date.
   d. For any emissions unit at a Class II source that has not begun normal operations on the particular date, actual emissions shall be based on applicable control requirements and projected conditions of operation.
   e. For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit. If the source owner or operator maintains and submits to the Control

Officer, on an annual basis for a period of 5 years from the date the unit resumes regular operations, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the Control Officer if the Control Officer determines the longer period to be more representative of normal source post-change operations.

5. "ADEQ" - No Change
6. "ADHS" - No Change
7. "Administrator" - No Change
8. "Adverse effects to human health" - No Change
9. "Adverse environmental effects" - No Change.
10. "Adverse impact on visibility" means visibility impairment ~~which~~ that interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of a Class I area, as determined according to section 17.16.630.
11. "Affected facility" - No Change
12. "Affected source" - No Change.
13. "Affected state: - No Change
14. "Affected unit" - No Change
15. "Afterburner" No Change
16. "Air contaminant" - No Change
17. "Air curtain destructor" - No Change
18. "Air pollution" - No Change
19. "Air pollution control equipment" - No Change
20. "Air quality control region" - No Change
21. "Allowable emissions: - No Change
22. "Alternative method" means any method of sampling and analyzing for an air pollutant ~~which~~ that is not a reference or equivalent method but which has been demonstrated to produce results adequate for the control officer's determination of compliance in accordance with subsection ~~17.12.040(D)~~ 17.12.045(D).
23. "Ambient air" - No Change
24. "Applicable implementation plan" - No Change
25. "Applicable requirement" - No Change
26. "Approved" - No Change
27. "AQCD" - No Change
28. " Architectural coating" - No Change
29. "A.R.S." - No Change
30. "Arizona Testing Manual" - No Change
31. "Asphalt concrete plant" - No Change
32. "ASTM" - No Change
33. "Attainment area" - No Change
34. " Begin actual construction " - No Change
35. "Best available control technology" - No Change
36. "Billable permit action" means a breakdown of the permit processing time into the categories of pre-application activities (training, management interface, telephone requests, tracking, developing and revising program materials, and database management) completeness review, substance review, and public involvement activities, and within each category, a further breakdown by employee name.
3~~6~~7. "Black liquor" –means waste liquor from the brown stock washer and spent cooking liquor ~~which~~ that have been concentrated in the multiple-effect evaporator system.
3~~7~~8. "Btu" – No change
3~~8~~9. "Building – No change
~~39~~40. "Calcine" – No Change.
4~~0~~1. "Capacity factor" – No Change
4~~1~~2. "Categorical sources" means the following classes of sources:

a. Coal cleaning plants with thermal dryers;
b. Kraft pulp mills;
c. Portland cement plants;
d. Primary zinc smelters;
e. Iron and steel mills;
f. Primary aluminum ore reduction plants;
g. Primary copper smelters;
h. Municipal incinerators capable of charging more than 50 tons of refuse per day;
i. Hydrofluoric, sulfuric, or nitric acid plants;
j. Petroleum refineries;
k. Lime plants;
l. Phosphate rock processing plants;
m. Coke oven batteries;
n. Sulfur recovery plants;
o. Carbon black plants using the furnace process;
p. Primary lead smelters;
q. Fuel conversion plants;
r. Sintering plants;
s. Secondary metal production plants;
t. Chemical process plants;
u. Fossil-fuel boilers, or ~~combination~~ combinations thereof, totaling more than 250 million Btu~~'s~~ per hour heat input;
v. Petroleum storage and transfer units with a total storage capacity ~~exceeding~~ more than 300,000 barrels;
w. Taconite preprocessing plants;
x. Glass fiber processing plants;
y. Charcoal production plants;
z. Fossil fuel-fired steam electric plants and combined cycle gas turbines of more than 250 million Btu~~'s~~ per hour heat input.

~~42~~3. "Cause" – No Change

~~44~~. "CEM" means a continuous emissions monitoring system or continuous monitoring system that is the total equipment required under the emission monitoring provisions in this Title, used to sample and, if applicable, to condition, to analyze, and to provide, on a continuous basis, a permanent record of emission or process parameters.

~~43~~5. "CFR"- No change"

~~44~~6. "Charge" – No Change

~~45~~7. "Coal" means all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D-388-91, (Classification of Coals by Rank).

a. "Clean Coal Technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility that will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam, that was not in widespread use as of November 15, 1990.
b. "Clean coal technology demonstration project:" means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of $2,500,000,000 for commercial demonstration of clean coal technology or similar projects funded through appropriations from the Environmental Protection Agency. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.
c. "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project operated for 5 years or less, and that complies with the SIP and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after the project is terminated.

~~4~~6~~8~~. "Combustion" – No Change
~~4~~7~~9~~. “Commence” – No Change
~~48~~50. "Complete" – No change
~~49~~51. "Concentrate" – No Change
5~~0~~2. "Concentrate dryer" - No Change
5~~1~~3. "Concentrate roaster" – No Change
5~~2~~4. "Condensate stripper system" – No Change
5~~3~~5. "Construction" – No Change
5~~4~~6. "Continuous monitoring system" – No Change
5~~5~~7. "Control" – No Change
5~~6~~8. "Control device" – No Change
5~~7~~9. "Control officer" – No Change
~~58~~60. "Controlled atmosphere incinerator" – No Change
~~59~~61. "Conventional" or "criteria" air pollutant – No Change
6~~0~~2. "Converter" - No Change
6~~1~~3. "County" – No Change
6~~2~~4. "Delivery vessels" - No Change
6~~3~~5. "Designated representative" – No Change
6~~4~~6. "Director" – No Change
6~~5~~7. "Discharge" – No Change
6~~6~~8. "Dispersion technique" means any technique ~~which~~ that attempts to affect the concentration of a pollutant in the ambient air by any of the following:
a. Using that portion of a stack ~~which~~ that exceeds good engineering practice stack height;
b. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or
c. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise. This shall not include any of the following:
~~(i)~~i. The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream.
~~(ii)~~ii. The merging of exhaust gas streams under any of the following conditions:
~~(a)~~(1)The source owner or operator demonstrates that the facility was originally designed and constructed with ~~such~~ the merged gas streams;
~~(b)~~(2)~~Such~~ The merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant, applying only to the emission limitation for that pollutant; or
~~(iii)~~iii.Smoke management in agricultural or silvicultural prescribed burning programs.
~~(iv)~~iv. Episodic restrictions on residential woodburning and open burning.
~~(v)~~v. Techniques ~~which~~ that increase final exhaust gas plume rise ~~where~~ if the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.
6~~7~~69. "Dust" or "Dust emissions" – No Change
~~68~~70."Dust suppressant" – No Change
71. “Electric utility steam generating unit” means any steam electric generating unit that is constructed for the purpose of supplying more than 1/3 of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
~~69~~72."Effluent" means any air contaminant ~~which~~ that is emitted and subsequently escapes into the atmosphere.

7~~0~~73."Emergency" – No Change
7~~1~~74."Emission" – No Change
7~~2~~75."Emissions allowable under the permit" – No Change
7~~3~~76."Emissions unit" means any part of a stationary source ~~which~~ that emits or would have the potential to emit any regulated air pollutant.
~~74~~77."Emission standard" – No Change
7~~5~~78."Enforceable" means all limitations and conditions ~~which~~ that are enforceable by the Administrator.
7~~6~~79."Environmental Protection Agency (EPA)" – No Change
7~~7~~80."Equivalent method" means any method of sampling and analyzing for an air pollutant ~~which~~ that has been demonstrated pursuant to section ~~17.12.040~~ 17.12.045 (Test Methods and Procedures) to have a consistent and quantitatively known relationship to the reference method, under specified conditions.
~~7~~81. "Excess emissions" or "emissions in excess of an emission limitation" – No Change
~~79~~82. "Existing source" – No Change
8~~0~~3. "Federal applicable requirement" – No Change
8~~1~~4. "Federal Land Manager" – No Change
8~~2~~5. "Federally enforceable" - No Change
8~~3~~6. "Federally listed hazardous air pollutant" – No Change
8~~4~~7. "Final permit" – No Change
8~~5~~8. "Fixed capital cost" – No Change
8~~6~~9. "Floating roof" – No Change
8~~7~~90. "Fossil fuel-fired steam generator" – No Change
~~88~~91. "Fuel" means any material ~~which~~ that is burned for the purpose of producing energy.
~~89~~92. "Fuel burning equipment" – No Change
93. "Fuel oil" means Number 2 through Number 6 fuel oils as specified in ASTM D-396-90a (Specification for Fuel Oils), gas turbine fuel oils Numbers 2-GT through 4-GT as specified in ASTM D-2880-90a (Specification for Gas Turbine Fuel Oils), or diesel fuel oils Numbers 2-D and 4-D as specified in ASTM D-975-90a (Specification for Diesel Fuel Oils).
9~~0~~4. "Fugitive dust" – No Change
9~~1~~5. "Fugitive emissions" means those emissions ~~which~~ that could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.
9~~2~~6. "Fume" – No Change
9~~3~~7. "Fume incinerator" – No Change
9~~4~~8. "General permit"means a permit issued by ADEQ pursuant to A.A.C. Title 18, Chapter 2, Article 5 and administered, inspected and enforced by the department pursuant to this title.
9~~5~~9. "Good engineering practice (GEP) stack height" – No Change
9~~6~~100"Haul road" – No Change
~~97~~101"Hazardous air pollutant" (HAP) – No Change
~~98~~102."Hazardous air pollutant reasonably available control technology" (HAPRACT) – No Change
~~99~~103."Hazardous Waste" – No Change
10~~0~~4."Hazardous Waste Fuel" – No Change
10~~1~~5."Heat input" – No Change
10~~2~~6."Herein" – No Change.
10~~3~~7."High sulfur oil" – No Change
10~~4~~8."High terrain" – No Change
10~~5~~9."Incinerator" – No Change
10~~6~~10."Indian governing body" – No Change
10~~7~~11."Indian reservation" – No Change
10~~8~~12."Innovative control technology" – No Change
10~~9~~13."Insignificant activity" – No Change

114. "Itemized bill" means a breakdown of the permit processing time into the categories of pre-application activities (teleconferences, accelerated processing meetings, permit regulatory discussions, etc.), completeness review, substantive review, and public involvement activities, and within each category, a further breakdown by employee name.

11~~0~~5."Kraft pulp mill" – No Change

11~~1~~6."Land stripping" or "land stripping activity" means removal of all or any portion of existing vegetation from parcels of land with equipment, which plows or scrapes the ground surface.

11~~2~~7."Lead" – No Change

11~~3~~8."Lime hydrator"- No Change

11~~4~~9."Lime kiln" means a unit used to calcinate lime rock or kraft pulp mill lime mud ~~which~~ that consists primarily of calcium carbonate, into quicklime, which is calcium oxide.

1~~15~~20."Lime plant" includes any plant, which produces a lime product from limestone by calcination. Hydration of the lime product is also considered to be part of the source.

11~~6~~21."Lime product" – No Change

11~~7~~22."Loading facility" – No Change

1~~18~~23."Low sulfur oil" – No Change.

1~~19~~24."Low terrain" - No Change

12~~0~~25."Lowest achievable emission rate" (LAER) – means, for any source, the more stringent rate of emissions based on one of the following:

a. The most stringent emissions limitation ~~which~~ that is contained in the SIP of any state for ~~such~~ the class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that ~~such~~ the limitations are not achievable; or,

b. The most stringent emissions limitation ~~which~~ that is achieved in practice by ~~such~~ the class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under applicable standards of performance ~~as contained~~ in Chapter 17.16 Articles VI and VII.

12~~1~~6."Major modification" means any physical change or change in the method of operation of a major source that would result in a significant net emissions increase of any regulated air pollutant.

a. Any net emissions increase that is significant for volatile organic compounds ~~shall be~~ is considered significant for ozone.

b. Any net emissions increase that is significant for oxides of nitrogen ~~shall be~~ is considered significant for ozone Nonattainment areas classified as marginal, moderate, serious or severe.

c. For the purposes of this definition the following ~~shall~~ are not ~~be considered~~ a physical change or change in the method of operation:

~~(i)~~i. ~~Maintenance~~ Routine maintenance, repair and replacement ~~which the control officer determines to be routine.~~;

~~(ii)~~ii. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. § 792, or by reason of a natural gas curtailment plan ~~pursuant to~~ under the Federal Power Act, 16 U.S.C. §§ 792 - 825r;

~~(iii)~~iii.Use of an alternative fuel by reason of an order or rule under Section 125 of the Act (Measures to Prevent Economic Disruption or Unemployment);

~~(iv)~~iv.Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

~~(v)~~v. Use of an alternative fuel or raw material by a stationary source ~~which~~ that either:

(a) The source was capable of accommodating before December 12, 1976, unless ~~such~~ the change would be prohibited under any federally enforceable permit condition ~~which was~~ established after December 12, 1976, ~~pursuant to~~ under 40 CFR 52.21, or under the permitting provisions of this Title; or

(b) The source is approved to use under any permit issued under 40 CFR 52.21, or under the permitting provisions of this Title.

~~(vi)~~vi. An increase in the hours of operation or in the production rate, unless ~~such~~ the change would be prohibited under any federally enforceable permit condition ~~which was~~ established after December 12, 1976, ~~pursuant to~~ under 40 CFR 52.21, or under the permitting provisions of this Title~~.~~;

~~(vii)~~vii. Any change in ownership at a stationary source~~.~~;

viii. The addition, replacement, or use of a pollution control project at an existing electric utility steam generating unit, unless the Director determines that the addition, replacement, or use renders the unit less environmentally beneficial, or except:

(1) When the Director has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent Title I air quality impact analysis in the area, if any, and

(2) The Director determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation;

ix. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, if the project complies with:

(1) The SIP and

(2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated;

x. For electric utility steam generating units located in attainment and unclassifiable areas only, the installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, if the project does not result in an increase in the potential to emit any regulated pollutant emitted by the unit. This exemption applies on a pollutant-by-pollutant basis; and

xi. For electric utility steam generating units located in attainment and unclassifiable areas only, the reactivation of a very clean coal-fired electric utility steam generating unit.

12~~2~~7. "Major source" means:

a. No Change

b. A major source under section 112 of the Act:

~~(i)~~i. For pollutants other than radionuclides, any stationary source that emits or has the potential to emit, in the aggregate, including fugitive emissions, 10 tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to Section 112(b) of the Act, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as described in Article 11 of AAC Chapter 2. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

~~(ii)~~ii. For radionuclides, "major source" shall have the meaning specified by the administrator by rule.

c. A major stationary source, as defined in Section 302 of the Act, that directly emits or has the potential to emit, 100 tpy or more of any air pollutant, including any major source of fugitive emissions of such pollutant. The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of Section 302(j) of the Act, unless the source belongs to one of the following categories of stationary source:

~~(i)~~i. Coal cleaning plants (with thermal dryers);

~~(ii)~~ii. Kraft pulp mills;

~~(iii)~~iii. Portland cement plants;

~~(iv)~~iv. Primary zinc smelters;

~~(v)~~v. Iron and steel mills;

~~(vi)~~vi. Primary aluminum ore reduction plants;

~~(vii)~~vii. Primary copper smelters;

~~(viii)~~viii. Municipal incinerators capable of charging more than 50 tons of refuse per day;

~~(ix)~~ix.Hydrofluoric, sulfuric, or nitric acid plants;
~~(x)~~x.Petroleum refineries;
~~(xi)~~xi.Lime plants;
~~(xii)~~xii.Phosphate rock processing plants;
~~(xiii)~~xiii.Coke oven batteries;
~~(xiv)~~xiv.Sulfur recovery plants;
~~(xv)~~xv.Carbon black plants (furnace process);
~~(xvi)~~xvi.Primary lead smelters;
~~(xvii)~~xvii.Fuel conversion plants;
~~(xviii)~~xviii.Sintering plants;
~~(xix)~~xix.Secondary metal production plants;
~~(xx)~~xx.Chemical process plants;
~~(xxi)~~xxi.Fossil-fuel boilers ~~(or combination therof)~~ or combinations thereof totaling more than 250 million British thermal units per hour heat input;
~~(xxii)~~xxii.Petroleum storage and transfer units with a total storage capacity ~~exceeding~~ more than 300,000 barrels;
~~(xxiii)~~xxiii.Taconite ore processing plants;
~~(xxiv)~~xxiv.Glass fiber processing plants;
~~(xxv)~~xxv.Charcoal production plants;
~~(xxvi)~~xxvi.Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input.
~~(xxvii)~~xxvii.~~All~~ Any other stationary source ~~categories~~ category ~~regulated by a standard promulgated~~ which as of August 7, 1980, is being regulated under section 111 or 112 of the Act~~, but only with respect to those air pollutants that have been regulated for that category~~.

128. Major source threshold" means the lowest applicable emissions rate for a pollutant that would cause the source to be a major source at the particular time and location, under 17.04.340.127.

12~~3~~9."Malfunction" means any sudden and unavoidable failure of air pollution control equipment, process equipment or a process to operate in a normal manner, but does not include failures that are caused by poor maintenance, careless operations or any other upset condition or equipment breakdown ~~which~~ that could have been prevented by the exercise of reasonable care.

12~~4~~30."Material permit condition" shall mean a condition ~~which~~ that satisfies all of the following:

a. No Change
b. No Change
c. The condition is one of the following:
   ~~(i)~~i. An enforceable emission standard imposed to avoid classification as a major modification or major source or to avoid triggering any other applicable requirement.
   ~~(ii)~~ii. A requirement to install, operate or maintain a maximum achievable control technology or hazardous air pollutant reasonably available control technology required pursuant to the requirements of A.R.S. § 49-426.06.
   ~~(iii)~~iii. A requirement for the installation or certification of a monitoring device.
   ~~(iv)~~iv. A requirement for the installation of air pollution control equipment.
   ~~(v)~~v. A requirement for the operation of air pollution control equipment.
   ~~(vi)~~vi. Any opacity standard required by section 111 (Standards of Performance for New Stationary Sources) or Title I, part C or D (Air Pollution Prevention and Control) of the Act.
d. No Change

12~~5~~31."Matte" _ No Change

12~~6~~32."Maximum achievable control technology" (MACT) means an emission standard that requires the maximum degree of reduction in emissions of the hazardous air pollutants subject to this Title, including a prohibition on such emissions where achievable, that the control officer, after considering the cost of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements, determines to be

achievable by a source to which such standard applies, through application of measures, processes, methods, systems or techniques including measures which:

a. reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications.;
b. ~~Enclose~~ enclose systems or processes to eliminate emissions.;
c. collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point.;
d. are design, equipment, work practice, or operational standards, including requirements for operator training or certification.; or
e. are a combination of the above.

1~~2~~733."Minor source" – No Change

1~~2~~834."Minor source baseline area" – No Change

1~~2~~935."Miscellaneous metal parts and products" for purposes of industrial coating include all of the following:

a. No Change
b. No Change.
c. No Change
d. No Change
e. No Change
f. No Change
g. Any other industrial category which coats metal parts or products under the Code in the "Standard Industrial Classification Manual, 1987" of Major Group 33 (primary metal industries), Major Group 34 (fabricated metal products), Major Group 35 (non-electric machinery), Major Group 36 (electrical machinery), Major Group 37 (transportation equipment), Major Group 38 (miscellaneous instruments), and Major Group 39 (miscellaneous manufacturing industries), except all of the following:
~~(i)~~i.Automobiles and light-duty trucks.
~~(ii)~~ii.Metal cans.
~~(iii)~~iii.Flat metal sheets and strips in the form of rolls or coils.
~~(iv)~~iv.Magnet wire for use in electrical machinery.
~~(v)~~v.Metal furniture.
~~(vi)~~vi.Large appliances.
~~(vii)~~vii.Exterior of airplanes.
~~(viii)~~viii.Automobile refinishing.
~~(ix)~~ix.Customized top coating of automobiles and trucks, if production is less than 35 vehicles per day.
~~(x)~~x.Exterior of marine vessels.

13~~0~~6. "Mobile source"- No Change

13~~1~~7. "Modification" or "modify" – No Change

13~~2~~8."Monitoring device" – No Change

13~~3~~9."Motor vehicle" – No Change

1~~34~~40."Multiple chamber incinerator" – No Change

1~~35~~41."Multiple-effect evaporator system" – No Change

1~~36~~42."NAAQS" – No Change

1~~37~~43."National ambient air quality standard" – No Change

144. "NAICS" means the 5 or 6-digit North American Industry Classification System-United States, 1997, number for industries used by the U.S Department of Commerce.

1~~38~~45."Necessary preconstruction approvals or permits" – No Change

1~~39~~46."NESHAP" – No Change

14~~0~~7."Net emissions increase" means:

a. The amount by which the sum of subparagraphs (i) and (ii) exceeds zero:
~~(i)~~i. Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and

~~(ii)~~ii. Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

~~(i)~~i. The date five years before construction on the particular change commences; and

~~(ii)~~ii. The date that the increase from the particular change occurs.

c. No Change

d. An increase or decrease in actual emissions of sulfur dioxide, nitrogen oxides, or particulate matter ~~which~~ that occurs before the applicable baseline date, as described in section 17.08.150, is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

e. No Change

f. A decrease in actual emissions is creditable only to the extent that:

~~(i)~~i. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

~~(ii)~~ii. It is federally enforceable at and after the time that actual construction on the particular change begins; and,

~~(iii)~~iii. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

~~(iv)~~iv. The emissions unit was actually operated and emitted the specific pollutant.

g. No Change

14~~1~~8. "Neutral sulfite semichemical pulping"- No Change

14~~2~~9. "New source" – No Change

14~~3~~50."Nitric acid plant" – No Change

14~~4~~51."Nitrogen oxides" – No Change

14~~5~~52."Nonattainment area" – No Change

14~~6~~53."Nonattainment area plan"- No Change

14~~7~~54."Nonpoint source" means a source of air contaminants ~~which~~ that lacks an identifiable plume or emission point.

14~~8~~55."NSPS" – No Change

14~~9~~56."Opacity" – No Change

15~~0~~7. "Open outdoor fire" or "open burning" – No Change

15~~1~~8."Operation" – No Change

15~~2~~9."Owner or operator" – No Change

15~~3~~60."Particulate matter" – No Change

15~~4~~61."Particulate matter emissions" means all finely divided solid or liquid materials other than uncombined water, emitted to the ambient air as measured by applicable test methods and procedures described in section ~~17.12.040~~ 17.12.045 (Test Methods and Procedures).

15~~5~~62."PDEQ" or "Department" means the Pima County Department of Environmental Quality.

15~~6~~63."Permitting authority" means the department or a county department or agency that is charged with enforcing a permit program adopted pursuant to A.R.S. § 49-480, subsection A.

164. "Permit processing time" means all time spent by PDEQ staff or consultants on tasks specifically related to the processing of an application for the issuance or renewal of a particular permit or permit revision, including time spent processing an application that is denied.

15~~7~~65."Person" includes any public or private corporation, company, partnership, firm, trust, association or society of persons, the federal government and any of its departments or agencies, the state and any of its agencies, departments or political subdivisions, as well as a natural person.

15~~8~~66."Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not mean Number 2 through Number 6 fuel oils as specified in ASTM D-396-90a (Specification for Fuel Oils), gas turbine fuel oils Numbers 2-GT through 4-GT as specified in ASTM D-2880-90a (Specification for Gas Turbine Fuel Oils), or diesel fuel oils Numbers 2-D and 4-D as specified in ASTM D-975-90 (Specification for Diesel Fuel Oils).

15~~9~~67."Planning agency" means the organization designated by the governor pursuant to 42 United States Code Section 7504 as having the authority and responsibility of preparing nonattainment area plans.

16~~0~~8. "Plume" means visible effluent.

169. "$PM_{2.5}$" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 CFR 50 Appendix L, or by an equivalent method designated in accordance with 40 CFR 53.

16~~1~~70"PM_{10}" – No Change

16~~2~~71."PM_{10} emissions" means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal ten micrometers emitted to the ambient air as measured by applicable test methods and procedures described in section ~~17.12.040~~ 17.12.045.

172. "Pollution control project" means any activity or project undertaken at an existing electric utility steam-generating unit to reduce emissions from the unit. The activities or project are limited to:

The installation of conventional or innovative pollution control technology, including advance flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls, and electrostatic precipitators;

a. An activity or project to accommodate switching to a fuel less polluting than the fuel used before the activity or project, including natural gas or coal re-burning, or the co-firing of natural gas and other fuels for the purpose of controlling emissions:

b. A permanent clean coal technology demonstration project conducted under Title 11, section 101 (d) of the Further Continuing Appropriations Act of 1985 (42 U.S.C. 5903 (d)), or subsequent appropriations, up to a total amount of $2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency, or

c. A permanent clean coal technology demonstration project that constitutes a re-powering project.

16~~3~~73."Portable source" means any building, structure, facility or installation subject to regulation pursuant to A.R.S. §49-426 ~~which~~ that emits or may emit any air pollutant and is capable of being operated at more than one location.

16~~4~~74."Potential to emit" or "potential emission rate" – No Change

16~~5~~75."Primary ambient air quality standards" means the ambient air quality standards ~~which~~ that define levels of air quality necessary, with an adequate margin of safety, to protect the public health, as specified in Chapter 17.08, Article I.

16~~6~~76."Primary standard attainment date" – No Change

16~~7~~77."Private driveway" – No Change

16~~8~~78."Private residence" means a one or two family dwelling unit.

16~~9~~79."Process" – No Change

17~~0~~80."Process source" means the last operation or process ~~which~~ that produces an air contaminant resulting from either:

a. No Change

b. No Change

17~~1~~81."Process weight" – No Change

17~~2~~82."Process weight rate" – No Change

17~~3~~83."Proposed permit" – No Change

17~~4~~84."Proposed final permit" means the version of a Class I permit that the Department proposes to issue and forwards to the Administrator for review in compliance with subsection A of section ~~17.12.190~~.17.12.200.

17~~5~~85."Quantifiable" – No Change

17~~6~~86."RACT (reasonably available control technology)" – No Change

187. "Reactivation of very clean coal-fired electric utility steam generating unit:" means any physical change or change in the method of operation associated with commencing commercial operations by a coal-fired utility unit after a period of discontinued operation if the unit:

a. Has not been in operation for the 2-year period before enactment of the Clean Air Act Amendments of 1990, and the emissions from the unit continue to be carried in the Control Officer's emissions inventory at the time of enactment;

b. Was equipped before shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%;

c. Is equipped with low-NOx burners before commencement of operations following reactivation; and

d. Is otherwise in compliance with the Act.

1~~77~~88."Reasonable further progress" – No Change

1~~78~~89."Reclaiming machinery" – No Change

1~~79~~90."Reconstruction" - No Change

1~~80~~91."Recovery furnace" – No Change

1~~81~~92."Reference method" – No Change

1~~82~~93."Regulated air pollutant" – No Change

1~~83~~94."Reid vapor pressure" – No Change

1~~84~~95."Replicable" – No Change

196. "Re-powering" means:

a. Replacing an existing coal-fired boiler with one of the following clean coal technologies:

i. Atmospheric or pressurized fluidized bed combustion;

ii. Integrated gasification combined cycle;

iii. Magnetohydrodynamics;

iv. Direct and indirect coal-fired turbines;

v. Integrated gasification fuel cells; or

vi. As determined by the Administrator, in consultation with the United States Secretary of Energy, a derivative of one or more of the above technologies; and

vii. Any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

b. Repowering also includes any oil, gas, or oil and gas-fired unit that has been awarded clean cost technology demonstration funding as of January 1, 1991, by the United States Department of Energy.

c. The Control Officer shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under section 409 of the Act.

197. "Representative actual annual emissions" means the average rate, in tons per year, at which a source is projected to emit a pollutant for the 2-year period after a physical change or change in the method of operation of a unit, (or a different consecutive 2-year period within 10 years after that change, if the Director determines that the different period is more representative of source operations), considering the effect the change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Director shall:

a. Consider all relevant information, including historical operational data, the company's representations, filings with Arizona or federal regulatory authorities, and compliance plans under Title IV of the Act; and

b. Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

1~~85~~98."Resource recovery project" means any facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse. Only energy conversion facilities that utilize solid waste ~~which~~ that provides more than 50 percent of the heat input shall be considered a resource recovery project under this Article.

1~~86~~99."Responsible official" means one of the following:

a. No Change
~~(i)~~i. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or
~~(ii)~~ii. The delegation of authority to such representatives is approved in advance by the permitting authority;
b. No Change
c. No Change
d. For affected sources:
~~(i)~~i. The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Act (Acid Deposition Control) or the regulations promulgated thereunder are concerned; and
~~(ii)~~ii. The designated representative for any other purposes under 40 CFR part 70.

1~~87~~200."Reverberatory smelting furnace" – No Change

1~~88~~201."Road" – No Change

~~189~~202."Road construction" – No Change

~~190~~203."Rotary lime kiln" – No Change

~~191~~204."Rules and regulations" – No Change

~~192~~205."Run" – No Change

~~193~~206."Secondary ambient air quality standards" – No Change

~~194~~207."Secondary emissions" means emissions ~~which~~ that are specific, well defined, quantifiable, occur as a result of the construction or operation of a major source or major modification, but do not come from the major source or major modification itself, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any off-site support facility ~~which~~ that would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major source or major modification. Secondary emissions do not include any emissions ~~which~~ that come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

~~195~~208."Service road" – No Change

~~196~~209"Shutdown" – No Change

~~197~~210."Significance levels" means the following ambient concentrations for the enumerated pollutants:

	Averaging Time				
Pollutant	**Annual**	**24 Hour**	**8 Hour**	**3 Hour**	**1 Hour**
SO_2	1 $\mu g/m^3$	5 $\mu g/m^3$		25 $\mu g/m^3$	
NO_2	1 $\mu g/m^3$				
CO			0.5 mg/m^3		2 mg/m^3
PM_{10}	1 $\mu g/m^3$	5 $\mu g/m^3$			

Except for the annual pollutant concentrations, exceedance of significance levels shall be deemed to occur when the ambient concentrations of the above pollutants is exceeded more than once per year at any one location. If ~~such~~ the concentrations occur at a specific location and at a time when Arizona ambient air quality standards for ~~such~~ the pollutant ~~is~~ are not violated, then the significance level does not apply.

~~198~~211."Significant" – No Change

~~199~~212."Slag" – No Change

213. "Small source" means a source with a potential to emit, without controls, less than the rate defined as significant in 17.04.340.211, but required to obtain a permit solely because it is subject to a standard under 40 CFR 63.

2~~00~~14."Smelt dissolving tank" – No Change
2~~01~~15."Smelter feed" – No Change
2~~02~~16."Smelting" – No Change
2~~03~~17."Smelting furnace" – No Change
2~~04~~18."Smoke" – No Change
2~~05~~19."Solvent degreasing" – No Change
2~~06~~20."Solvent degreasing unit"- No Change
2~~07~~21."Source" – No Change
2~~08~~22."Stack" – No Change
2~~09~~23."Stack in existence" means that the owner or operator had either: No Change
2~~10~~24."Standard conditions" – No Change
2~~11~~25."Start-up" – No Change
2~~12~~26."State" – No Change
2~~13~~27."State implementation plan" (SIP) – No Change
2~~14~~28."Stationary rotating machinery" – No Change.
~~215~~29."Stationary source" means any building, structure, facility or installation subject to regulation ~~which~~ that emits or may emit any air pollutant.
2~~16~~30."Submerged fill pipe" – No Change
2~~17~~31."Sulfuric acid plant" – No Change
2~~18~~32."Supplementary control system" (SCS) – No Change
233. "Synthetic minor" means a source with a permit that contains voluntarily accepted emissions limitations, controls, or other requirements (for example, a cap on production rates or house of operation, or limits on the type of fuel) under section 17.12.220 to reduce the potential to emit to a level below the major source threshold.
2~~19~~34."Temporary source" No Change
22~~0~~35."Total reduced sulfur" (TRS) – No Change
22~~1~~36."Total suspended particulate" (TSP) – No Change
237. "Trivial activities" means activities and emissions units, such as the following, that may be omitted from a Class I or Class II permit application. Certain of the following listed activities include qualifying statements intended to exclude similar activities:
a. Combustion emissions from propulsion of mobile sources;
b. Air-conditioning units used for human comfort that do not have applicable requirements under title VI of the Act;
c. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing, industrial or commercial process;
d. Non-commercial food preparation;
e. Janitorial services and consumer use of janitorial products;
f. Internal combustion engines used for landscaping purposes;
g. Laundry activities, except for dry-cleaning and steam boilers;
h. Bathroom and toilet vent emissions;
i. Emergency or backup electrical generators at residential locations;
j. Tobacco smoking rooms and areas;
k. Blacksmith forges;
l. Plant maintenance and upkeep activities, including grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots, if these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and do not otherwise trigger a permit revision. Cleaning and painting activities qualify as trivial activities if they are not subject to VOC or hazardous air pollutant (HAP) control requirements;
m. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating, de-greasing, or solvent metal cleaning activities, and not otherwise triggering a permit revision;

n. Portable electrical generators that can be moved by hand from one location to another. "Moved by hand" means capable of being moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device;
o. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning, or machining wood, metal, or plastic;
p. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAP metals. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are insignificant activities based on size or production level thresholds. Brazing, soldering, and welding equipment, and cutting torches directly related to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately in this definition;
q. Air compressors and pneumatically operated equipment, including hand tools;
r. Batteries and battery charging stations, except at battery manufacturing plants;
s Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP;
t. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
u. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
v. Drop hammers or hydraulic presses for forging or metalworking;
w. Equipment used exclusively to slaughter animals, not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment;
x. Vents from continuous emissions monitors and other analyzers;
y. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities;
z Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation;
aa. Equipment used for surface coating, painting, dipping, or spraying operations, except those that will emit VOC or HAP;
bb. CO(2) lasers used only on metals and other materials that do not emit HAP in the process;
cc. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam;
dd. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants;
ee. Laser trimmers using dust collection to prevent fugitive emissions;
ff. Bench-scale laboratory equipment used for physical or chemical analysis, but not laboratory fume hoods or vents;
gg. Routine calibration and maintenance of laboratory equipment or other analytical instruments;
hh. Equipment used for quality control, quality assurance, or inspection purposes, including sampling equipment used to withdraw materials for analysis;
ii. Hydraulic and hydrostatic testing equipment;
jj. Environmental chambers not using HAP gases;
kk Shock chambers;
ll. Humidity chambers;
mm. Solar simulators;
nn. Fugitive emissions related to movement of passenger vehicles, if the emissions are not counted for applicability purposes under 17.04.340(127)(c) and any required fugitive dust control plan or its equivalent is submitted with the application;
oo. Process water filtration systems and demineralizers;
pp. Demineralized water tanks and demineralizer vents;
qq. Oxygen scavenging or de-aeration of water;
rr. Ozone generators;
ss. Fire suppression systems;
tt. Emergency road flares;
uu. Steam vents and safety relief valves;
ww. Steam leaks; and
xx. Steam cleaning operations and steam sterilizers

~~22~~38."Unclassified area" – No Change
~~23~~39."Uncombined water" – No Change
~~24~~40."Unpaved road" – No Change
~~25~~41."Urban or suburban open area" – No Change
~~26~~42."Used Oil" – No Change
~~27~~43."Used Oil Fuel" – No Change
~~28~~44."Vacant lot" – No Change
~~29~~45."Vapor" – No Change
~~30~~46."Vapor pressure" – No Change
~~31~~47."Vapor recovery/disposal system" means a system ~~which~~ that consists of one of the following:

a. A system ~~which~~ that processes the displaced vapors and either recovers or disposes of the vapors being processed so as to prevent an emission rate greater than 0.29 pounds per one thousand gallons (thirty-five grams per one thousand liters) into the atmosphere.
b. A vapor handling system ~~which~~ that directs at least ninety-five percent by weight of the displaced vapors to a vapor capture and/or recovery system.
c. No Change

~~32~~48."Visibility impairment" means any humanly perceptible change in visibility (light extinction, visual range, contrast, and coloration) from that which would have existed under natural conditions.
~~33~~49."Visible emissions" – No Change
~~34~~50."Volatile organic compounds (VOC)" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. This includes any such organic compound other than the following:

a. No Change
b. No Change
c. No Change
d. No Change
e. No Change
f. No Change
g. No Change
h. No Change
i. No Change
j. No Change
k. No Change
l. No Change
m. No Change
n. No Change
o. No Change
p. No Change
q. No Change
r. No Change
s. No Change
t. No Change
u. No Change
v. No Change
w. No Change
x. No Change
y. 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca);
z. 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb);
aa. 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee);
bb. Difluoromethane (HFC-32);

cc. Ethylfluoride (HFC-161);

dd. 1,1,1,3,3,3-hexafluoropropane (HFC-236fa);

ee. 1,1,2,2,3-pentafluoropropane (HFC-245ca);

ff. 1,1,2,3,3-pentafluoropropane (HFC-245ea);

gg. 1,1,1,2,3-pentafluoropropane (HFC-245eb);

hh. 1,1,1,3,3-pentafluoropropane (HFC-245fa);

ii. 1,1,1,2,3,3-hexafluoropropane (HFC-236ea);

jj. 1,1,1,3,3-pentafluorobutane (HFC-365mfc);

kk. Chlorofluoromethane (HCFC-31);

ll. 1 chloro-1-fluoroethane (HCFC-151a);

mm. 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);

nn. 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$);

oo. 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$);

pp. 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$);

qq. 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$;

rr. Methyl acetate; and

~~y~~ss. Perfluorocarbon compounds that fall into these classes:

~~(i)~~i. Cyclic, branched, or linear, completely fluorinated alkanes;

~~(ii)~~ii. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

~~(iii)~~iii. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations~~; and~~ or

~~(iv)~~iv. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

tt. T-Butyl Acetate (TBAc)

2~~35~~51."Wood waste burner" means an incinerator designed and used exclusively for the burning of wood wastes consisting of wood slabs, scraps, shavings, barks, sawdust or other wood material, including those that generate steam as a by-product. (Ord. 2005- § 1, 2005; 1998;Ord. 1998-27 § 2, 1998; Ord. 1997-79 § 2, 1997; Ord. 1996-50 § 1, 1996; Ord. 1995-87 § 3, 1995; Ord. 1994-83 § 2, 1994: Ord. 1993-128 § 1 (part), 1993; Ord. 1991-136 § 2, 1991; Ord. 1990-113 § 1, 1990; Ord. 1989-165 § 9, 1989; Ord. 1987-175 § 1, 1987; Ord. 1986-227 § 1 (part), 1986; Ord. 1983-196 (part), 1983; Ord. 1982-91 (part), 1982; Ord.1981-12 (part), 1981; Ord. 1979-93 (part), 1979)

17.04.350 Meanings of mathematical symbols.

No Change:

17.04.360 Chemical symbols and abbreviations.

No Change

17.04.370 Scientific units.

No Change

17.04.380 Acronyms.

No Change

Article X. Procedures for Amending.

17.04.390 Legal authority.

No Change

17.04.400 General procedures.

No Change

17.04.410 Public participation in rulemaking.

A.R.S. §§ 49-471.06 through 49-471.12 (as Added by Laws 2000, Ch. 194, § 3, effective January 1, 2002) is hereby adopted in its entirety and is incorporated herein by this reference.

A. The control officer shall encourage the public to provide input to the rulemaking process.

B. Extensive publicity, including prominently displayed advertisements in newspapers of wide circulation and notification by mail to interested public and private organizations, shall be given to all public hearings conducted by the air quality advisory council, the air quality hearing board, and the board of supervisors concerning proposed amendments to this Title.

C. The control officer shall consider public comment on methods to improve this Title, or to improve air quality in Pima County. For example, informal comments received from interested citizens may be filed and referred to when amending this document. (Ord.2005 - § 1, 2005, Ord. 1979-93 (part), 1979)

17.04.420 Applicable implementation plan; savings

No Change

NOTICE OF FINAL RULEMAKING

Pima County Air Quality Control Regulations

Pima County Code

Title 17 – Air Quality Control

Chapter 12 Permits and Permit Revisions

[M05-114]

PREAMBLE

1. Sections Affected	Rulemaking Action
Pima County Code (PCC) 17.12.035	New
PCC 17.12.040	New
PCC 17.12.045	Amend
PCC 17.12.050	Amend
PCC 17.12.060	Amend
PCC 17.12.070	Amend
PCC 17.12.180	Amend
PCC 17.12.190	Renumber
PCC 17.12.195	New
PCC 17.12.200	Renumber
PCC 17.12.210	Amend and Renumber
PCC 17.12. 220	Amend
PCC 17.12.230	Amend
PCC 17.12.235	New
PCC 17.12.240	New
PCC 17.12.245	Renumber
PCC 17.12.250	New
PCC 17.12.255	Amend and Renumber
PCC 17.12.260	Amend
PCC 17.12.365	Amend

Table 17.12.480	Repealed
Table 17.12.530	Amend

2. Statutory authority for the rulemaking:

Arizona Revised Statutes (A.R.S.) § 49-112 – County Regulations; standards

A.R.S. Title 49, Chapter 3, Article 3. County Air Pollution Control

A.R.S.§ 49.471.08 – Expedited Rulemaking

A.R.S. § 49.479 – Rules; hearing

3. The effective date of the rules:

May 19, 2005

4. List of all previous notices appearing in the register addressing the proposed rule or ordinance and a concise explanatory statement.

Notice of Expedited Rulemaking, Arizona Administrative Register (AAR) 11: 9, page 895 – 925, February 25, 2005.

Notice of Rulemaking Docket Opening: AAR 10:39, page 3899, September 24, 2004.

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name:	Jean Parkinson Program Coordinator
Address:	Pima County DEQ 150 W. Congress Tucson, AZ 85701
Telephone:	(520) 740-3978
Fax:	(520) 882-7709
E-mail:	Jean.Parkinson@deq.pima.gov

6 An explanation of the rule, including the Control Officer's reasons for initiating the rule:

Section	Action	Section by Section Analysis
PCC 17.12.035	New	Conform with ADEQ (R18-2-310, 7 AAR 1164, 03/09/01)
PCC 17.12.040	New	Conform with ADEQ (R18-2-310.01, 7 AAR 1164, 03/09/01)
PCC 17.12.045	Amend	Conform with EPA (40 CFR 50-52, 58, 60- 61, 63, 75; 07/01/04)
PCC 17.12.050	Amend	Conform with EPA (40 CFR 52, 60-61; 07/01/04)
PCC 17.12.060	Amend	Conform with ADEQ (R18-2-313, 7 AAR 1164, 03/09/01)
PCC 17.12.070	Amend	Reference change for section number within text due to renumbering
PCC 17.12.180	Amend	Conform with ADEQ (R18-2-306, 6 AAR 343, 01/14/00; 5 AAR 4074, 10/20/99)
PCC 17.12.190	Renumber	
PCC 17.12.195	New	Conform with ADEQ (R18-2-306.02, 5 AAR 4074; 10/29/99)
PCC 17.12.200	Renumber	
PCC 17.12.210	Amend &Renumber – Reference change for section number within text	
PCC 17.12.220	Amend	Conform with ADEQ (R18-2-309, 10 AAR 2833, 07/09/04)
PCC 17.12.230	Amend	Conform with ADEQ (R18-2-317, 5 AAR 4074; 10/29/99)
PCC 17.12.235	New	Conform with ADEQ (R18-2-317.01, 5 AAR 4074; 10/29/99)
PCC 17.12.240	New	Conform with ADEQ (R18-2-317.02, 5 AAR 4074; 10/29/99)
PCC 17.12.245	Renumber	
PCC 17.12.250	New	Conform with ADEQ (R18-2-318.01, 5 AAR 4074; 10/29/99)
PCC 17.12.255	Amend	Conform with ADEQ (R18-2-319, 5 AAR 4074; 10/29/99)
PCC 17.12.260	Amend	Conform with ADEQ (R18-2-320, 6 AAR 343, 01/14/00)
PCC 17.12.365	Amend	Conform with ADEQ (R18-2-333, 10 AAR 1348, 04/09/04)
PCC 17.12.480	Amend	Typographical correction
Table 17.12.480	Repealed to conform to ADEQ (R18-2-602, 10 AAR 388, 02/06/04)	

Table 17.12.530 Amend Conform with ADEQ (R18-2-602, 10 AAR 388, 02/06/04)

§17.12.035 (Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown) Summary: This rule (ADEQ Rule 18-2-310) was adopted by the Pima County Board of Supervisors on October 19, 2004 by reference in Chapter 17.28, and is being repealed from that Chapter and included in its entirety in Chapter 17.12. §17.12.035 clarifies those conditions under which a source may obtain an affirmative defense if the source exceeds applicable emission limitations due to malfunction, startup, and shutdown. This rule specifies that an affirmative defense is available in any civil or administrative proceeding (other than one for injunctive relief) upon the owner or operator demonstrating and agreeing to specific conditions (affirmative defense in criminal proceedings are contained in A.R.S. §§49-464 (P), (Q), and (R) and 49-514 (O), (P), and (Q). This rule requires that before owners and operators are granted an affirmative defense they must demonstrate that the source's equipment and operations during startup, shutdown, and malfunction provided maximum protection to public health and to ambient air quality. In this rule, the majority of conditions for an affirmative defense relating to malfunction, startup, and shutdown are identical. The rule, while recognizing the inevitability of these events, requires owners or operators to maximize their planning efforts and anticipate their responses whether the event is a malfunction, startup, or shutdown.

§17.12.040 (Reporting Requirements) Summary: This rule (ADEQ Rule 18-2-310.01) was adopted by the Pima County Board of Supervisors on October 19, 2004 by reference in Chapter 17.28, and is being repealed from that Chapter and included in its entirety in Chapter 17.12. This rule requires a two-part reporting requirement for an owner or operator following an excess emissions event. The first requires notification by phone or fax within 24 hours of the event and the second requires a written report within 72 hours to the Control Officer. The reporting requirements allow PDEQ to record and track such events as part of permitting and compliance efforts.

§17.12.045 (Test Methods and Procedures) Summary: This rule is being updated to include the recent codification of Title 40 of the Code of Federal Regulations (CFR) as of July 1, 2004.

§17.12.050 (Performance Tests) Summary: This rule is being updated to include the recent codification of Title 40 of the CFR, as of July 1, 2004.

§17.12.060 (Existing Source Emission Monitoring) Summary: This rule was amended to correct a section number referenced within the text.

§17.12.070 (Quality Assurance) Summary: This rule was amended to correct a section number referenced within the text.

§17.12.180 (Permit Contents) Summary: This rule (ADEQ Rule 18-2-306) was amended to conform to ADEQ's rule, which was changed to mirror the changes EPA made to 40 CFR Part 70 in the federal Compliance Assurance Monitoring (CAM) rule.

§17.12.190 (Permits Containing Voluntarily Accepted Emission Limitations and Standards) Summary: This rule was renumbered from §17.12.220 due to the reorganization of the section numbers to coincide with the order of appearance in ADEQ's rules.

§17.12.195 (Establishment of an Emissions Cap) Summary: This new rule (ADEQ Rule 18-2-306.02) was created to conform to ADEQ's rule, which provides a special category of emission caps. Maximum limits for caps at Class II sources and requirements for averaging periods are established in this rule.

§17.12.200 (Permit Review by the EPA and Affected States) Summary: This rule was renumbered from §17.12.190 due to the addition of new rules.

§17.12.210 (Emission Standards and Limitations) Summary: This rule was renumbered from §17.12.200 and amended to correct a section number referenced within the text.

§17.12.220 (Compliance Plan; Certification) Summary: This rule (ADEQ Rule 18-2-309) was revised to conform to ADEQ's rule and as required by recent revisions to 40 CFR Part 70. This federal regulation requires responsible officials (ROs) of major sources of air pollutants to certify compliance with the Clean Air Act. Specifically, ROs needed to identify in their certification whether the status of compliance with the Act was continuous or intermittent during the period covered by the ongoing certification. In its 1997 Compliance Assurance Monitoring (CAM) rule, EPA amended the compliance certification provisions for the Operating Permits Program, 40 CFR Part 70 (62 FR 54900, October 22, 1997). The 1997 amendments replaced the existing certification requirement with a requirement to indicate whether the certification was based on "methods" that provide continuous or intermittent "data" and whether deviations, excursions, or exceedances occurred. In 2000, ADEQ amended R18-2-309 to mirror the 1997 changes made to part 70 by EPA (6 AAR, 343, January 14, 2000). In 1999, the Natural Resources Defense Council, Inc. (NRDC) filed a petition with the U.S. Court of Appeals for the D.C. Circuit challenging this and other aspects of the 1997 amendments. NRDC claimed that the 1997 amendments were directly inconsistent with the explicit requirement of the Act that compliance certifications identify whether "compliance" is continuous or intermittent. The Court agreed with NRDC that the 1997 amendments were contrary to the statute, which requires that certification include whether compliance, not just data, is continuous or intermittent, and remanded the regulations to EPA for revision in accordance with the Court's opinion (194 F.3d 130, October 29, 1999).

On June 27, 2003, EPA published final amendments to the compliance certification provisions for the Operating Permits Program (part 70) (68 FR 38518). Specifically, the regulations now require, as ordered by the Court, that the

compliance certification include whether the facility or source has been in continuous or intermittent compliance. EPA removed the language of the 1997 amendments that referred to continuous or intermittent data. State, local, and tribal governments that implement Part 70 operating permits programs were directed to revise their existing compliance certification requirements to make them consistent with the 2003 amendments to Part 70.

The revisions to §17.12.220 will put the rule back in compliance with 40 CFR Part 70, by again making the language mirror that of the revisions EPA made to the regulation in accordance with the Court's remand, and the revisions by ADEQ to Rule 18-2-309. The revisions require Class I sources to certify that compliance with their permit provisions was continuous. Additionally, §17.12.220 applies to both Class I and Class II sources; Class II sources will also be required to certify continuous compliance with the terms and conditions of their permits.

§17.12.230 (Facility Changes Allowed Without Permit Revisions – Class I) Summary: This rule (ADEQ Rule 18-2-317) was amended to conform to changes by ADEQ to correct grammatical changes and delete unnecessary and redundant wording.

§17.12.235 (Facility Changes that Require a Permit Revision – Class II) Summary: This new rule (ADEQ Rule 18-2-317.01) was created to conform to ADEQ's new rule that streamlines the permitting process and achieves operational cycle time reductions in key permitting processes, thus reducing the costs to the permittee.

§17.12.240 (Procedures for Certain Changes that do not Require a Permit Revision – Class II) Summary: This new rule (ADEQ Rule 18-2-317.02) was created to conform to ADEQ's new rule that streamlines the permitting process and achieves operational cycle time reductions in key permitting processes, thus reducing the costs to the permittee.

§17.12.245 (Administrative Permit Amendments) Summary: This rule was renumbered due to the addition of new rules.

§17.12.250 (Annual Summary Permit Amendments for Class II Permits) Summary: This new rule (ADEQ Rule 18-2-318.01) was created to conform to ADEQ's new rule that requires public access to any amendment to a Class II permit that incorporate changes reflected in logs or notices filed under §17.12.240.

§17.12.255 (Minor Permit Revisions) Summary: This rule (ADEQ Rule 18-2-319) was amended to reflect changes in the ADEQ rule that included procedures for minor permit revisions for Class II sources and correct grammatical errors.

§17.12.260 (Significant Permit Revisions) Summary: This rule (ADEQ Rule 18-2-320) was amended to conform to changes in the ADEQ rule and to clarify the public participation requirements for specific changes to Class II permits. In addition, sectional references were corrected, and grammatical errors were revised.

§17.12.365 (Acid Rain) Summary: This rule (ADEQ Rule 18-2-333) was amended to incorporate federal regulations by reference from 40 CFR Part 72, 74, 75, and 76 and updated to the recent codification of July 1, 2004. PDEQ is obligated under state and federal law to incorporate federal acid rain requirements in the air quality permits issued by PDEQ.

§17.12.480 (Open Burning Permits) Summary: This rule was amended to correct a typographical error in the last line, which changed a sectional reference from 17.12.140 (B)(2)(b)(i) or (ii) to 17.12.140 (B)(2)(a)(i) or (ii).

Table 17.12.480 (Open Burning Permit/Non-Permit Requirements) Summary: This table is "repealed" since it no longer conforms to §17.12.480 (Open Burning Permits) or ADEQ Rule 18-2-602.

Table 17.12.530 (Open Burning Permit Fee Schedules) Summary: This table is amended to conform to the terminology of §17.12.480 (Open Burning Permits) and ADEQ Rule 18-2-602.

Statutory Authority: A.R.S §49-471.08 – Expedited rule or Ordinance making – provides a statutory mechanism for a declaration of an expedited process if the rulemaking is a conforming change to directly reflect federal or state rule or law.

Background: Periodically the Pima County Department of Environmental Quality updates and conforms to the Arizona Administrative Code and the Code of Federal Regulations in an effort to achieve consistency and accuracy in Air Quality Regulations for Pima County. The last conforming changes to Title 17 were in 2004.

7. Reference to any study relevant to the rule that the Control Officer reviewed and either relied or did or did not rely on in its evaluation of or justification for the rule, where the public may review each study, all data underlying each study, and any analysis of each study and other supporting material:

No studies were reviewed in reference to this rulemaking action.

Not Applicable

8. The preliminary summary of the economic, small business, and consumer impact:

These rules impose no additional costs on the regulated community, small businesses, political subdivisions, or members of the public. Costs to PDEQ are those that may accrue for implementation and enforcement of the new rules. Although there were some small incremental costs due to this expedited rulemaking, PDEQ does not intend to hire any additional employees to implement or enforce these rules. These revisions should not have an economic impact

on businesses in Pima County, and should not impose additional costs on the regulated community, small businesses, political subdivisions, and members of the public beyond that already incurred by reason of Federal or State law. In addition, Pima County is updating rules to conform to the Arizona Administrative Code and recent rule amendments finalized by the Arizona Department of Environmental Quality and EPA. These revisions should have not have an economic impact on Pima County businesses beyond that already incurred by reason of State and/or Federal law.

9. A description of the changes between the "Notice of Expedited Rulemaking," including supplemental notices, and final rules (if applicable):

Table of Contents – Changed 8.0.180 **to** 17.12.180 and changed 8.0.230 **to** 17.12.230. Added space after 17.12.245.

All Ordinance references for the proposed changes in the text of Chapter 17.12 were changed from Ord. 2005 - §3, 2005; **to** Ord. 2005 - §2, 2005.

17.12.035 (B): Changed referenced section from 17.12.065 to 17.12.040

17.12.050 (B): The strike-out version of "Unless" was changed to a small capital: ~~unless~~

17.12.060 (E): Renumbered sectional references of first paragraph, last line, to be in chronological order.

17.12.060 (F)(4)(b): Added Ordinance reference at the end of the paragraph (Ord. 2005- §2, 2005; and corrected punctuation.

17.12.180: The heading was changed from "Permit contents for Class I or II permits" **to** Permit Contents. Deleted for Class I or II permits. Corrected missing underlined words in (A)(8)(a): including and in (A)(8)(f): all pollutants

17.12.180 (A) (5): Changed "17.12.190 and section 17.12.040" **to** 17.12.040 and section 17.12.190

17.12.180 (A)(11)(c): Underlined Ensure

17.12.180 (A)(14): Underlined Upon

17.12.180(A) (14): Added punctuation (period) after 17.12.240(B)(5)

17.12.180(B)(1)(c): Changed referenced section from 17.12.220 to 17.12.190 and deleted roman numerical change from (i) to ii. and (ii) to ii. Deleted ~~subdivision (1)~~ and added subsection (B)(1)(c)(i) and deleted ~~of this subparagraph~~.

17.12.180(E)(1): Deleted comma after "God" and changed require~~s~~ to require.

17.12.180(F): Underlined under in line 3.

17.12.190: Added **(Renumbered)** and ordinance reference.

17.12.210: Added **(Renumbered)** and ordinance reference.

17.12.220(A)(2) Deleted all punctuation changes to roman numbers, not required.

17.12.230(A)(4): Added space after semi-colon

17.12.230(B): Changed "subsection A, D, and E" **to** subsection (A), (D), and (E)

17.12.230(C): Changed "subsection D" **to** subsection (D)

17.12.230(D): Changed "subsections A through C" **to** subsections (A) through (C)

17.12.230(G): Changed "17.12.180.A.11" **to** "17.12.180 (A) (11)"

17.12.230(H): Changed subsection A to (A) and deleted "~~of this section~~"

17.12.230(I): Deleted first parenthesis in paragraph.

17.12.235(A)(4): Added space between (3), (4)

17.12.240(B)(2): Deleted extra space after 17.04.340 and changed (111) to (113)

17.12.245 (A): Changed (A), (B), (C), (D) to annotate no changes to these subsections.

17.12.250(2): Changed (Ord. 2005- §2) **to** (Ord. 2005- §2, 2005)

17.12.255(I): Changed duplicate subsection (I) **to** (J)

17.12.260(E): Changed 17.12.160.E.1 to 17.12.160(E)(1) and 17.12.160.B to 17.12.160(B)

17.12.350(A)(4): Changed referenced statutes to reflect correct punctuation and grammar.

17.12.350(B): Changed A.3,c,d and e **to** (A)(3)(c), (d), and (e)

17.12.365 (A) and (B): Added a comma after 75

Table 17.12.530 (Open Burning Permit Fee Schedules): Added the following for clarification:

[2]The term of a residential burning permit shall not exceed three (3) consecutive or non- consecutive days within a thirty-day period.

[3]The term of a commercial/agricultural burning permit shall not exceed ninety days.

10. A summary of the comments made regarding the rule and the agency response to them:
None

11. Any other matters prescribed by the statute that are applicable to the specific agency or to any specific rule or class of rules:
None

12. Incorporations by reference and their location in the rules:
All referenced incorporations provided in the text of the rule or ordinance are available for review at the Pima County Department of Environmental Quality. The state statutes: Arizona Revised Statutes, Title 49, Chapter 3 are available at the PDEQ office or at: http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp

The federal regulations are available at the PDEQ office or at: http://www.ecfr.gpoaccess.gov

13. Were the rules previously made as emergency rules?
No. These rules were previously published as "Expedited," in accordance with A.R.S. § 49-471.08 (A).

14. The full text of the rule follows:

Chapter 17.12 PERMITS AND PERMIT REVISIONS

Sections:

Article I. General Provisions.

17.12.010 Statutory authority.
17.12.020 Planning, constructing, or operating without a permit.
17.12.030 Sampling, testing, and analysis requirements.
17.12.035 Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown.
17.12.040 Reporting Requirements.
~~17.12.040~~17.12.045 Test methods and procedures.
17.12.050 Performance tests.
17.12.060 Existing source emission monitoring.
17.12.070 Quality assurance.
17.12.080 Permit display or posting.
17.12.085 Notice by building permit agencies.
17.12.090 (Reserved)
17.12.100 Permits for state delegated emission sources.
17.12.110 Grant or denial of applications.
17.12.120 Appeals of permit actions.
17.12.130 Assistance to Small Business.

Article II. Individual Source Permits.

17.12.140 Applicability; classes of permit.
17.12.150 Transition from installation and operating permit program to unitary permit program.
17.12.160 Permit application processing procedures.
17.12.170 Public records; confidentiality.
17.12.180. Permit contents.
~~17.12.200~~ 17.12.190 Permits containing voluntarily accepted emission limitations and standards.
17.12.195 Establishment of an Emissions Cap
~~17.12.190~~ 17.12.200 Permit review by the EPA and affected states.
~~17.12.200~~ 17.12.210 Emission standards and limitations.
~~17.12.210~~ 17.12.220 Compliance plan; certification.
~~17.12.220 Permits containing voluntarily accepted emission limitations and standards.~~
17.12.230 Facility changes allowed without permit revisions – Class I.
17.12.235 Facility changes that require a permit revision – Class II
17.12.240 Procedures for certain changes that do not require a permit revision – Class II.
~~17.12.240~~ 17.12.245 Administrative permit amendments.
17.12.250 Annual summary permit amendments for Class II permits.

Article I. General Provisions.

17.12.010 Statutory authority.

A. Statutory provisions relating to the control officer's jurisdiction over permit requirements and authority for permit fees are contained in the Arizona Revised Statutes, A.R.S. Sections 49-402, 49-471, and 49-401, et seq.

B. No Change

C. No Change

D. Issuance of an air permit shall not relieve the permittee from compliance with all local, county, state, and federal laws, statutes, and codes. (Ord. 2005 - §2, 2005; Ord. 1993-128 § 3, 1993; Ord. 1989-165 § 11, 1989: Ord. 1987-175 § 2, 1987: Ord 1979-93 (part), 1979)

17.12.020 Planning, constructing, or operating without a permit.

No Change

17.12.030 Sampling, testing, and analysis requirements.

No Change

17.12.035 Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown

A. Applicability

This rule establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

1. Promulgated pursuant to Sections 111 or 112 of the Act,
2. Promulgated pursuant to Titles IV or VI of the Clean Air Act,
3. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. E.P.A.,
4. Contained in section 17.12.280 (F), or
5. Included in a permit to meet the requirements of section 17.12.590 (A)(5).

B. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner or operator of the source has complied with the reporting requirements of section 17.12.040 and has demonstrated all of the following:

1. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the operator;
2. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
3. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to insure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the owner or operator satisfactorily demonstrated that the measures were impracticable;
4. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
5. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
6. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
7. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Article 2 of this Chapter that could be attributed to the emitting source;
8. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
9. All emissions monitoring systems were kept in operation if at all practicable; and

10. The owner or operator's actions in response to the excess emissions were documented by contemporaneous records.

C. Affirmative Defense for Startup and Shutdown

1. Except as provided in subsection (C)(2), and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. The owner or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner or operator of the source has complied with the reporting requirements of section 17.12.040 and has demonstrated all of the following:
   a. The excess emissions could not have been prevented through careful and prudent planning and design;
   b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
   c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
   d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
   e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
   f. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Article I of this Chapter that could be attributed to the emitting source;
   g. All emissions monitoring systems were kept in operation if at all practicable; and
   h. The owner or operator's actions in response to the excess emissions were documented by contemporaneous records.
2. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to subsection (B).

D. Affirmative Defense for Malfunctions During Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to subsection (B).

E. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under subsection (B) or (C), the owner or operator of the source shall demonstrate, through submission of the data and information required by this Section and Section 17.12.040, that all reasonable and practicable measures within the owner or operator's control were implemented to prevent the occurrence of the excess emissions. (Ord. 2005- § 2, 2005)

17.12.040 Reporting Requirements

A. The owner or operator of any source shall report to the Control Officer any emissions in excess of the limits established by this Chapter or the applicable permit. The report shall be in 2 parts as specified below:
   1. Notification by telephone or facsimile within 24 hours of the time the owner or operator first learned of the occurrence of excess emissions that includes all available information from subsection (B).
   2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under subsection (1).

B. The excess emissions report shall contain the following information:
   1. The identity of each stack or other emission point where the excess emissions occurred;
   2. The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
   3. The time and duration or expected duration of the excess emissions;

4. The identity of the equipment from which the excess emissions emanated;
5. The nature and cause of the emissions;
6. The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions;
7. The steps that were or are being taken to limit the excess emissions; and
8. If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.

C. In the case of continuous or recurring excess emissions, the notification requirements of this Section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsections (A) and (B). (Ord. 2005 - § 2, 2005)

~~17.12.040~~. 17.12.045 Test methods and procedures.

A. ~~Except as otherwise specified in this Chapter, the applicable procedures and testing methods contained in the Arizona Testing Manual; 40 CFR 52, Appendices D and E; 40 CFR 60, Appendices A through F; and 40 CFR 61, Appendices B and C shall be used to determine compliance with the requirements established in this Title or contained in permits issued pursuant to this Title~~

The following test methods and protocols are approved for use as directed by PDEQ under this Chapter. These standards are incorporated by reference as of July 1, 2004 (and no future editions or amendments). These standards are on file with PDEQ and are also available from the U.S. Government Printing Office, Superintendent of Documents, Mail Stop SSOP, Washington D.C. 20402-9328.

1. 40 CFR 50;
2. 40 CFR 50, Appendices A through K;
3. 40 CFR Part 51, Appendix M, Appendix s, Section IV, Appendix W;
4. 40 CFR 52, Appendices D and E;
5. 40 CFR 58;
6. 40 CFR 58, all appendices;
7. 40 CFR 60, all appendices;
8. 40 CFR 61, all appendices;
9. 40 CFR 63, all appendices;
10. 40 CFR 75, all appendices.

B. Except as otherwise provided in this subsection the opacity of visible emissions shall be determined by Reference Method 9 of the Arizona Testing Manual or Appendix A in 40 CFR 60. A permit may specify a method, other than Method 9, for determining the opacity of emissions from a particular emissions unit, if the method has been promulgated by the Administrator in 40 CFR 60, Appendix A.

C. No Change

D. Except for ambient air monitoring and emissions testing required under Chapter 17.16, Articles VI and VII, alternative and equivalent test methods in any test plan submitted to the control officer may be approved by the control officer for the duration of that plan provided that the following three criteria are met:

1. The alternative or equivalent test method measures the same chemical and physical characteristics as the test method it is intended to replace.
2. The alternative or equivalent test method has substantially the same or better reliability, accuracy, and precision as the test method it is intended to replace.
3. Applicable quality assurance procedures are followed in accordance with the Arizona Testing Manual, 40 CFR 60 or other methods approved by the control officer. (Ord. 2005 - §2, 2005; Ord. 1993-128 § 3, 1993)

17.12.050 Performance tests.

A. No Change

B. Performance tests shall be conducted and data reduced in accordance with the test method and procedures contained in the Arizona Testing Manual, 40 CFR 52; Appendices D and E, 40 CFR 60; Appendices A through F; and 40 CFR 61, Appendices B and C. (These standards are incorporated by reference as of July 1, 2004 and no future editions or amendments. These standards are on file with PDEQ and are also available from the U.S. Government Printing Office, Superintendent of Documents, Mail Stop SSOP, Washington D.C. 20402-9328). ~~unless~~ Unless the control officer:
   1. No Change
   2. No Change
   3. No Change
   4. No Change
   5. No Change

C. No Change
D. No Change
E. No Change
F. No Change
G. No Change
H. No Change
I. Nothing in this Section shall be so construed as to prevent the utilization of measurements from emissions monitoring devices or techniques not designated as performance tests as evidence of compliance with applicable good maintenance and operating requirements. (Ord. 2005 - § 2, 2005; Ord. 1994-83 § 5, 1994: Ord. 1993-128 § 3 (part), 1993)

17.12.060 Existing source emission monitoring.

A. Every source subject to an existing source performance standard as specified in this title shall install, calibrate, operate, and maintain all monitoring equipment necessary for continuously monitoring the pollutants and other gases specified in this Section for the applicable source category.
   1. No Change.
   2. No Change
   3. No Change
   4. No Change

B. No Change
C. Minimum monitoring requirements:
   1. No Change
      a. A continuous monitoring system for the measurement of opacity which meets the performance specifications of this Section shall be installed, calibrated, maintained, and operated in accordance with the procedures of this Section by the owner or operator of any such steam generator of greater than 250 million Btu per hour heat input except where:
         ~~(i)~~i. Gaseous fuel is the only fuel burned, or
         ~~(ii)~~ii. Oil or a mixture of gas and oil are the only fuels burned and the source is able to comply with the applicable particulate matter and opacity rules without utilization of particulate matter collection equipment, and where the source has never been found to be in violation through any administrative or judicial proceedings, or accepted responsibility for any violation of any visible emission standard.
      b. No Change.
      c. No Change
      d. No Change
   2. No Change
   3. No Change
   4. No Change

D. No Change.

1. No Change
2. No Change
3. No Change
4. Monitor location: All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions of process parameter (i.e., oxygen, or carbon dioxide) from the affected facility are obtained. Additional guidance for location of continuous monitoring systems to obtain representative samples ~~are~~ is contained in the applicable performance specifications of Appendix B of 40 CFR 60.
5. No Change
6. No Change.
7. No Change

E. Minimum data requirement.

The following paragraphs set forth the minimum data reporting requirements for sources employing continuous monitoring equipment as specified in this Section. These periodic reports do not relieve the source operator from the reporting requirements of section 17.12.040 and section 17.12.180.

1. No Change
2. No Change.
3. No Change
4. No Change
5. No Change
6. No Change

F. No Change

1. For fossil-fuel fired steam generators the following procedures shall be used to convert gaseous emission monitoring data in parts per million to g/million cal (lb/million Btu) where necessary.
   a. When the owner or operator of a fossil-fuel fired steam generator elects under paragraph d of subdivision 1 of subsection C of this section to measure oxygen in the flue gases, the measurements of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry).
      ~~(i)~~i. When measurements are on a wet basis, except where wet scrubbers are employed or where moisture is otherwise added to stack gases, the following conversion procedure shall be used:

$$E_Q = C_{WS} F_W \frac{20.9}{20.9(1 - B_{wa}) - \%O_{2ws}}$$

      ~~(ii)~~ii. When measurements are on a wet basis and the water vapor content of the stack gas is determined at least once every fifteen minutes the following conversion procedure shall be used:

$$E_Q = C_{WS} F \frac{20.9}{20.9(1 - B_{wa}) - \%O_{2ws}}$$

Note: Use of this equation is contingent upon demonstrating the ability to accurately determine B(ws) such that any absolute error in B(ws) will not cause an error of more than ±1.5 percent in the term.

$$\frac{20.9}{20.9(1 - B_{wa}) - \%O_{2ws}}$$

      ~~(iii)~~iii. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E_Q = CF \frac{20.9}{20.9 - \%O_{2ws}}$$

b. When the owner or operator elects under C.1.d. of this Section to measure carbon dioxide in the flue gases, the measurement of the pollutant concentration and the carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure used;

$$E_Q = CF_C \frac{100}{\%CO_2}$$

c. The values used in the equations under F.1. of this section are derived as follows:

E_Q = pollutant emission, g/million cal (lb/million Btu)

C = pollutant concentration, g/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each hourly period by 4.16 x 10[-5] M g/dscm per ppm (2.64 x 10[-9] M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole), M = 64 for sulfur dioxide and 46 for oxides of nitrogen.

C_{ws} = pollutant concentrations at stack conditions, g/wscm (lb/wscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15 x 10[-5] M lb/wscm per ppm) (2.59 x 10[-5] M lb/ wscf per ppm) where M = pollutant molecular weight, g/g mole (lb/lb mole). M = 64 for sulfur dioxide and 46 for nitrogen oxides.

$\%O_2$, $\%CO_2$ = Oxygen or carbon dioxide volume (expressed as percent) determined with equipment specified under D.1.d. of this Section.

F, F_c = A factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_c), respectively. Values of F and F_c are given in § 60.45(f) of Part 60, Chapter 1, Title 40, Code of Federal Regulations.

F_w = A factor representing a ratio of the volume of wet flue gases generated to the caloric value of the fuel combusted. Values of F_w are given in Reference Method 19 of the Arizona Testing Manual and in Appendix A-7, Method 19 of 40 CFR 60.

B_{wa} = Proportion by volume of water vapor in the ambient air. Approval may be given for determination of B_{wa} by on-site instrumental measurement provided that the absolute accuracy of the measurement technique can be demonstrated to be within ±0.7 percent water vapor. Estimation methods for B_{wa} are given in Reference Method 19 of the Arizona Testing Manual and in Appendix A-7, Method 19 of 40 CFR 60.

B_{ws} = Proportion by volume of water vapor in the stack gas.

2. No Change
3. No Change
4. a. No Change
   b. Alternative methods of converting pollutant concentration measurements to the units of the emission standards. (Ord. 2005- §2, 2005; Ord. 2004-97 §3, 2004, Ord. 1994-83 §6, 1994~~:~~ Ord. 1993-128 §3 (part), 1993)

17.12.070 Quality assurance.
Facilities subject to permit requirements of this chapter shall submit a quality assurance plan to the control officer that meets the requirements of ~~17.12.040(D)(3)~~ 17.12.045(D)(3) within twelve months of the effective date of this section. Facilities subject to the requirements of 17.12.060 shall submit a quality assurance plan as specified in the permit. (Ord. 2005- § 2, 2005; Ord. 2004-97§ 3, Ord. 1995-87 § 10, 1995;. Ord. 1994-83 § 7, 1994: Ord. 1993-128 § 3 (part), 1993)

17.12.080 Permit display or posting.
No Change

17.12.085 Notice by building permit agencies
No Change

17.12.090 (Reserved).
No Change

17.12.100 Permits for state delegated emission sources.
No Change

17.12.110 Grant or denial of applications.
No Change

17.12.120 Appeals of permit actions.
No Change

17.12.130 Assistance to Small Business.
No Change

Article II. Individual Source Permits.
17.12.140 Applicability; classes of permits.
No Change

17.12.150 Transition from installation and operating permit program to unitary permit program.
No Change

17.12.160 Permit application processing procedures.
No Change

17.12.170 Public records; confidentiality.
No Change

17.12.180 Permit contents.

A. Each permit issued shall include the following elements:
   1. No Change
   2. Enforceable emission limitations and standards, including ~~those~~ operational requirements and limitations that ~~assure~~ ensure compliance with all applicable requirements at the time of issuance and operational requirements and limitations that have been voluntarily accepted ~~pursuant to~~ under ~~17.12.220~~17.12.190
      a. The permit shall specify and reference the origin of and authority for each term or condition and identify any difference in form as compared to the applicable requirement upon which the term or condition is based.

b. The permit shall state that, ~~where~~ if an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

c. Any permit containing an equivalency demonstration for an alternative emission limit submitted ~~pursuant to~~ under 17.12.160.D shall contain provisions to ensure that any resulting emissions limit has been demonstrated to be quantifiable, accountable, enforceable, and based on replicable procedures.

d. The permit shall specify applicable requirements for fugitive emission limitations, regardless of whether the source category in question is included in the list of sources contained in the definition of major source in 17.04.340.

3. No Change

4. No Change

5. ~~With respect to reporting, the~~ The permit shall incorporate all applicable reporting requirements, including reporting requirements established ~~pursuant to~~ under section ~~17.12.220~~ 17.12.040 and section 17.12.190, and require the following:

a. Submittal of reports of any required monitoring at least every 6 months. All instances of deviations from permit requirements shall be clearly identified in such reports. All required reports shall be certified by a responsible official consistent with 17.12.160.H and ~~17.12.210.A.5~~ 17.12.220.A.5.

b. No Change

6. A permit condition prohibiting emissions exceeding any allowances that the source lawfully holds under Title IV of the Act (Acid Deposition Control) or the regulations promulgated thereunder.

a. ~~No permit revision shall be~~ A permit revision is not required for increases in emissions that are authorized by allowances acquired ~~pursuant to~~ under the acid rain program, ~~provided that such~~ if the increases do not require a permit revision under any other applicable requirement.

b. ~~No~~ A limit shall not be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to non-compliance with any other applicable requirement.

c. Any ~~such~~ allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act (Acid Deposition Control).

d. Any permit issued ~~pursuant to~~ under the requirements of this Chapter and Title V of the Act (Permits) to a unit subject to the provisions of Title IV of the Act (Acid Deposition Control) shall include conditions prohibiting all of the following:

i. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.

ii. Exceedances of applicable emission rates.

iii. ~~The use~~ Use of any allowance prior to the year for which it was allocated.

iv. Contravention of any other provision of the permit.

7. A severability clause to ensure the continued validity of the various permit requirements in the event of a challenge to any ~~portions~~ portion of the permit.

8. Provisions stating the following:

a. The permittee shall comply with all conditions of the permit including~~.~~ ~~The permit shall contain~~ all applicable requirements of ~~federal and~~ Arizona air quality statutes A.R.S. Title 49, Chapter 3, ~~and federal, state~~ and Pima County air quality rules. Any permit noncompliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in a permit ~~constitutes~~ is a violation of the Act.

b. ~~Need to halt or reduce activity not a defense.~~ It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

c. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

d. The permit does not convey any property rights of any sort, or any exclusive privilege to the permit holder.

e. The permittee shall furnish to the control officer, within a reasonable time, any information that the control officer may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon the control officer's request, the permittee shall also furnish to the control officer copies of records required to be kept by the permit. For information claimed to be confidential, the permittee shall furnish a copy of such records directly to the Administrator along with a claim of confidentiality.

f. For any major source operating in a non-attainment area for ~~any pollutant(s)~~ all pollutants for which the source is classified as a major source, the source shall comply with reasonably available control technology.

9. No Change

10. No Change

11. Terms and conditions for reasonably anticipated operating scenarios identified by the source in its application as approved by the control officer. Such terms and conditions shall:

a. ~~Shall require~~ Require the source, contemporaneously with making a change from one operating scenario to another, to record in a log at the permitted facility a record of the scenario under which it is operating;

b. ~~Shall extend~~ Extend the permit shield described in 17.12.310 to all terms and conditions under each such operating scenario; and

c. ~~Shall ensure~~ Ensure that the terms and conditions of each such alternative scenario meet all applicable requirements and the requirements of this title

12. Terms and conditions, if the permit applicant requests them, as approved by the control officer, for the trading of emissions increases and decreases in the permitted facility, to the extent that the applicable requirements provide for trading increases and decreases without a case-by-case approval of each emissions trade. Such terms and conditions:

a. Shall include all terms required under subsections A and C of this section to determine compliance;

b. May extend the permit shield described in subsection D of this section to all terms and conditions that allow such increases and decreases in emissions;

c. Shall not include trading ~~involving~~ that involves emission units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emission trades; and

d. Shall meet all applicable requirements and requirements of this title.

13. No Change

14. ~~If a~~ Upon request of a permit applicant ~~requests it~~, the control officer shall issue ~~permits~~ a permit that ~~contain~~ contains terms and conditions allowing for the trading of emission increases and decreases in the permitted facility solely for the purpose of complying with a federally enforceable emission cap ~~that is~~ established in the permit independent of otherwise applicable requirements. The permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The control officer shall not ~~be required to~~ include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall also require compliance with all applicable requirements. Changes made under this paragraph ~~(14)~~ shall not include modifications under any provision of Title I of the Act and may not exceed emissions allowable under the permit. The terms and conditions shall provide for, Class I sources, for notice that conforms to 17.12.230 (D) and (E) and for Class II sources, for logging that conforms to 17.12.240 (B) (5). In addition, the notices for Class I and Class II sources shall describe ~~and that~~ ~~describes~~ how the increases and decreases in emissions will comply with the terms and conditions of the permit.

15. ~~Such other~~ Other terms and conditions as are required by the Act, A.R.S. Title 49, Chapter 3, Articles 1, 2 and 3 and the rules adopted ~~pursuant thereto~~ in Title 17.

B. Federally Enforceable Requirements

1. No Change

a. Except as provided in paragraph (B)(2) of this subsection, all terms and conditions in a Class I permit, including any ~~provisions~~ provision designed to limit a source's potential to emit~~.~~;

b. Terms or conditions in a Class II permit setting forth federal applicable requirements~~,~~ and;

c. Terms and conditions in any permit ~~which are~~ entered into voluntarily pursuant to section ~~17.12.220~~, 17.12.190 as follows:

i. Emissions limitations, controls or other requirements~~.~~; and

ii. Monitoring, recordkeeping and reporting requirements associated with the emissions limitations, controls or other requirements in ~~subdivision (i)~~ subsection (B)(1)(c)(i) ~~of this subparagraph~~.

2. No Change

C. ~~All permits~~ Each permit shall contain a compliance plan that meets the requirements of ~~17.12.210.~~ 17.12.220.

D. No Change

E. Emergency provision.

1. An "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, ~~which situation~~ that require~~s~~ immediate corrective action to restore normal operation and that causes the sources to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emission attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with ~~such~~ the technology-based emission limitations if the conditions of subsection (E)(3) are met.

3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the ~~cause(s)~~cause or causes of the emergency;

b. At the time of the emergency, ~~The~~ the permitted facility was ~~at the time~~ being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

d. The permittee submitted notice of the emergency to the control officer by certified mail or hand delivery within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

F. A class I permit issued to a major source shall require that revisions be made ~~pursuant to~~ under 17.12.270 to incorporate additional applicable requirements adopted by the Administrator ~~pursuant to~~ under the Act that become applicable to a source with a permit with a remaining permit term of three or more years. No reopening shall be required if the effective date of the applicable requirement is after the expiration of the permit. The revisions shall be made as expeditiously as practicable, but not later than eighteen months after the promulgation of such standards and regulations. Any permit revision required pursuant to this subsection shall comply with provisions in 17.12.280 for permit renewal and shall reset the five year permit term. (Ord.2005- § 2, 2005; Ord. 1998-27 § 5, 1998; Ord. 1995-87 § 13, 1995; Ord. 1994-83 § 15, 1994: Ord. 1993-128 § 3 (part), 1993)

~~17.12.220~~ 17.12.190 Permits containing voluntarily accepted emission limitations and standards.
(Renumbered)
No Change (Ord.2005- §2, 2005; Ord. 1997-95 § 1, 1997; Ord. 1995-87 § 15, 1995; Ord. 1994-83 § 18, 1994; Ord./ 1993-128 § 3 (part), 1993)

17.12.195 Establishment of an Emissions Cap

A. An applicant may, in its application for a new permit, renewal of an existing permit, or as a significant permit revision, request an emissions cap for a particular pollutant expressed in tons per year as determined on a 12-month rolling average, or any shorter averaging time necessary to enforce any applicable requirement, for any emissions unit, combination of emissions units, or an entire source to allow operating flexibility including emissions trading for the purpose of complying with the cap. This Section shall not apply to sources that hold an authority to operate under a general permit pursuant to Article 5 of this Chapter.

B. An emissions cap for a Class II source that limits the emissions of a particular pollutant for the entire source shall not exceed any of the following:
   1. The applicable requirement for the pollutant if expressed in tons per year;
   2. The source's actual emissions plus the applicable significance level for the pollutant established in 17.04.340 (211);
   3. The applicable major source threshold for the pollutant; or
   4. A sourcewide emission limitation for the pollutant voluntarily agreed to by the source under 17.12.220.

C. In order to incorporate an emissions cap in a permit the applicant must demonstrate to the Control Officer that terms and conditions in the permit will:
   1. Ensure compliance with all applicable requirements for the pollutant;
   2. Contain replicable procedures to ensure that the emissions cap is enforceable as a practical matter and emissions trading conducted under it is quantifiable and enforceable as a practical matter. For the purposes of this Section, "enforceable as a practical matter" shall include the following criteria:
      a. The permit conditions are permanent and quantifiable;
      b. The permit includes a legally enforceable obligation to comply;
      c. The limits impose an objective and quantifiable operational or production limit or require the use of in-place air pollution control equipment;
      d. The permit limits have short-term averaging times consistent with the averaging times of the applicable requirement;
      e. The permit conditions are enforceable and are independent of any other applicable limitations; and
      f. The permit conditions for monitoring, recordkeeping, and reporting requirements are sufficient to comply with 17.12.180 (A)(3),(4), and (5).
   3. For a Class I permit, include all terms required under 17.12.180 (A) and 17.12.210.

D. Class I sources shall log an increase or decrease in actual emissions authorized as a trade under an emissions cap unless an applicable requirement requires notice to the Control Officer. The log shall contain the information required by the permit including, at a minimum, when the proposed emissions increase or decrease occurred, a description of the physical change or change in method of operation that produced the increase or decrease, the change in emissions from the physical change or change in method of operation, and how the increase or decrease in emissions complies with the permit. Class II sources shall comply with 17.12.240 (B)(5).

E. The Control Officer shall not include in an emissions cap or emissions trading allowed under a cap any emissions unit for which the emissions are not quantifiable or for which there are no replicable procedures or practical means to enforce emissions trades. (Ord. 2005- § 2, 2005).

~~17.12.190~~ 17.12.200 Permit review by the EPA and affected states.

A. No Change
B. No Change
C. No Change
D. Review by Affected States
   1. For each Class I permit, the control officer shall provide notice of each proposed permit to any affected state on or before the time that the control officer provides this notice to the public as required under 17.12.340

except to the extent ~~17.12.250~~ 17.12.255 (Minor Permit Revisions) requires the timing of the notice to be different.

2. If the control officer refuses to accept a recommendation of any affected state submitted during the public or affected state review period, the control officer shall notify the Administrator and the affected state in writing. The notification shall include the control officer's reasons for not accepting any such recommendation, and shall be provided to the Administrator as part of the submittal of the proposed final permit. The control officer shall not be required to accept recommendations that are not based on federal applicable requirements or requirements of state law.

E. No Change

F. No Change

G. Prohibition on Default Issuance

1. No Class I permit including a permit renewal or revision shall be issued until affected states and the Administrator have had an opportunity to review the proposed permit.

2. No permit or renewal shall be issued unless the control officer has acted on the application. (Ord. 2005- § 2, 2005; Ord. 1998-27 § 6, 1998; Ord. 1994-83 § 16, 1994: Ord. 1993-128 § 3 (part), 1993)

~~17.12.200~~ 17.12.210 Emission standards and limitations. (Renumbered)

No Change

(Ord. 2005-43 §2, 2005; Ord. 1993-128 § 3, 1993)

~~17.12.210~~ 17.12.220 Compliance plan; certification.

A. All Class I and II permits shall contain the following elements with respect to compliance:

1. No Change

2. Requirements for ~~compliance certification~~ certifications of compliance with terms and conditions contained in ~~the~~ a Class I or II permit, including ~~emission~~ emissions limitations, standards, ~~or~~ and work practices. Permits shall include each of the following:

a. The frequency ~~for~~ of submissions of compliance certifications, which shall not be less than annually;

b. No Change

c. A requirement that the compliance certification include all of the following (the identification of applicable information may cross-reference the permit or previous reports, as applicable):

i. No Change

ii. The identification of the methods or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period. ~~The methods and other means under 17.12.180(A)(3). If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making false certification or omitting material information;~~

~~iii.~~ ~~The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in subsection (2)(c)(ii). The certification shall identify each deviation and take it into account for consideration in the compliance certification. For emission units subject to 40 CFR 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR 64 occurred; and~~

The methods and other means shall include, at a minimum, the methods, and means required under 17.12.180(A)(3). If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with

section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

iii. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in subsection (2)(c)(ii). The certification shall identify each deviation and take it into account ~~for consideration~~ in the compliance certification. For emission units subject to 40 CFR 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR 64 occurred; and

iv. No Change

d. A requirement that permittees submit all compliance certifications ~~be submitted~~ to the control officer. Class I permittees shall also submit compliance certifications to the Administrator ~~as well~~.

e. ~~Such additional~~ Additional requirements ~~as may be~~ specified ~~pursuant to~~ in sections 114(a)(3) and 504(b) of the Act (Inspections, Monitoring and Entry or Permit Requirements and Conditions) or pursuant to section ~~17.12.220~~ 17.12.190.

3. A requirement for any document required to be submitted by a ~~permit~~ permittee, including reports, to contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this Chapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

4. Inspection and entry provisions ~~which~~ that require that upon presentation of proper credentials, the permittee shall allow the control officer to:

a. Enter upon the permittee's premises where a source is located, ~~or~~ emissions-related activity is conducted, or ~~where~~ records are required to be kept under the conditions of the permit;

b. No Change

c. No Change

d. No Change

e. Record any inspection by use of written, electronic, magnetic ~~and~~ or photographic media.

5.A compliance plan that contains all the following:

a. A description of the compliance status of the source with respect to all applicable requirements~~.~~;

b. A description as follows:

~~(i)~~i. For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with ~~such~~ requirements~~.~~;

~~(ii)~~ii. For applicable requirements that will become effective during the permit term, a statement that the source will meet ~~such~~ the requirements on a timely basis~~;~~ and

~~(iii)~~iii. For requirements for which the source is not in compliance at the time of permit issuance, a narrative description of how the source will achieve compliance with such requirements~~.~~;

c. A compliance schedule as follows:

~~(i)~~i. For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with ~~such~~ the requirements~~.~~;

~~(ii)~~ii. For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis. A statement that the source will meet in a timely manner applicable requirements that become effective during the permit term shall satisfy this provision, unless a more detailed schedule is expressly required by the applicable requirement~~.~~;

~~(iii)~~iii. A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. ~~Such a~~ The schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirement for which the source will be in

noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. ~~Any such~~ The schedule of compliance shall ~~be supplemental to~~ supplement, and shall not sanction noncompliance with, the applicable requirements on which it is based.

d. A schedule for submission of certified progress reports no less frequently than every 6 months for sources required to have a schedule of compliance to remedy a violation. ~~Certified~~ The progress reports shall contain:

~~(i)~~i. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

~~(ii)~~ii. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.

~~c.~~6. The compliance plan content requirements specified in ~~this~~ subdivision (5) shall apply and be included in the acid rain portion of a compliance plan for an affected source, except as specifically superseded by regulations promulgated under Title IV of the Act (Acid Deposition Control) and incorporated ~~pursuant to~~ under section 17.12.365 with regard to the schedule and ~~method(s)~~ each method the source will use to achieve compliance with the acid rain emissions limitations.

~~6~~7. If there is a Federal Implementation Plan (FIP) applicable to the source, a provision that compliance with the FIP is required. (Ord. 2005- § 2, 2005; Ord. 1998-27 § 7, 1998; Ord. 1995-87 § 14, 1995; Ord. 1994-83 § 17, 1994: Ord. 1993-128 § 3 (part), 1993)

17.12.230 Facility changes allowed without permit revisions – Class I.

A. A facility with a Class I permit may make changes without a permit revision if all of the following apply:

1. The changes are not modifications under any provision of Title I of the Act (Air Pollution Prevention and Control) or under A.R.S. 49-401.01(17)~~.~~;
2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions~~.~~;
3. The changes do not violate any applicable requirements or trigger any additional applicable requirements~~.~~;
4. The changes satisfy all requirements for a minor permit revision under ~~17.12.250~~-17.12.255~~.~~; and
5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.

B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if ~~it~~ the substitution meets all of the requirements of subsections ~~A, D and E~~ (A), (D), and (E) ~~of this Section~~.

C. Except for sources with authority to operate under general permits, permitted sources may trade increases and decreases in emissions within the permitted facility, as established in the permit ~~pursuant to~~ under 17.12.180(A)(12), ~~where~~ if an applicable implementation plan provides for ~~such~~ the emissions trades~~,~~ without applying for a permit revision and based on the seven working days notice prescribed in subsection ~~D~~ (D) of this section. This provision is available ~~in those cases where~~ if the permit does not ~~already~~ provide for ~~such~~ the emissions trading as a minor permit revision.

D. For each change under subsections ~~A through C~~ (A) through (C) ~~of this section~~, a written notice, by certified mail or hand delivery, shall be received by the control officer and~~,~~ ~~for Class I permits,~~ the Administrator a minimum of seven (7) working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change, or if advance notification is not practicable as soon after the change as possible.

E. Each notification shall include:

1. When the proposed change will occur~~.~~;
2. A description of ~~each such~~ the change~~.~~;
3. Any change in emissions of regulated air pollutants~~.~~;

4. The pollutants emitted subject to the emissions trade, if any~~.~~;
5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade~~.~~;
6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply~~.~~; and
7. Any permit term or condition that is no longer applicable as a result of the change.

F. The permit shield described in 17.12.310 shall not apply to any change made ~~pursuant to~~ under subsections ~~A through C~~ (A) through (C) ~~of this section~~. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the implementation plan authorizing the emissions trade.

G. Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under 17.12.180~~.A.11~~ (A)(11) shall not require any prior notice under this Section.

H. Notwithstanding any other part of this Section, the control officer may require a permit to be revised for any change that when considered together with any other changes submitted by the same source under this section over the term of the permit, do not satisfy subsection ~~A~~ (A) ~~of this section~~.

I. The control officer shall make available to the public monthly summaries of all notices received under this section. ~~(~~(Ord. 2005- § 2, 2005, Ord. 1998-27 § 8, 1998; Ord. 1997-79 § 5, 1997; Ord. 1995-87 § 16, 1995; Ord. 1994-83 § 19, 1994: Ord. 1993-128 § 3 (part), 1993)

17.12.235 Facility Changes that Require a Permit Revision – Class II

A. The following changes at a source with a Class II permit shall require a permit revision:
   1. A change that triggers a new applicable requirement or violates an existing applicable requirement.
   2. Establishment of, or change in, an emissions cap;
   3. A change that will require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
   4. A change that results in emissions that are subject to monitoring, recordkeeping or reporting under 17.12.180 (A)(3), (4), or (5) if the emissions cannot be measured or otherwise adequately quantified by monitoring, recordkeeping, or reporting requirements already in the permit;
   5. A change that will authorize the burning of used oil, used oil fuel, hazardous waste, or hazardous waste fuel, or any other fuel not currently authorized by the permit;
   6. A change that requires the source to obtain a Class I permit;
   7. Replacement of an item of air pollution control equipment listed in the permit with one that does not have the same or better pollutant removal efficiency;
   8. Establishment or revision of a limit under 17.12.190;
   9. Increasing operating hours or rates of production above the permitted level; and
   10. A change that relaxes monitoring, recordkeeping, or reporting requirements, except when the change results:
      a. From removing equipment that results in a permanent decrease in actual emissions, if the source keeps on-site records of the change in a log that satisfies Appendix 3 of this Chapter and if the requirements that are relaxed are present in the permit solely for the equipment that was removed; or
      b. From a change in an applicable requirement.

B. A source with a Class II permit may make any physical change or change in the method of operation without revising the source's permit unless the change is specifically prohibited in the source's permit or is a change described in subsection (A). A change that does not require a permit revision may still be subject to requirements in 17.12.245. (Ord. 2005- § 2, 2005)

17.12.240 Procedures for Certain Changes that do not Require a Permit Revision - Class II

A. Except for a physical change or change in the method of operation at a Class II source requiring a permit revision under 17.12.235, or a change subject to logging or notice requirements in subsection (B) or (C), a change at a Class II source shall not be subject to revision, notice, or logging requirements under this Chapter.

B. Except as otherwise provided in the conditions applicable to an emissions cap created under 17.12.195, the following changes may be made if the source keeps onsite records of the changes according to subsection (I) below:

1. Implementing an alternative operating scenario, including raw material changes;
2. Changing process equipment, operating procedures, or making any other physical change if the permit requires the change to be logged;
3. Engaging in any new insignificant activity listed in 17.04.340(113)(a) through (i) but not listed in the permit;
4. Replacing an item of air pollution control equipment listed in the permit with an identical (same model, different serial number) item. The Control Officer may require verification of efficiency of the new equipment by performance tests; and
5. A change that results in a decrease in actual emissions if the source wants to claim credit for the decrease in determining whether the source has a net emissions increase for any purpose. The logged information shall include a description of the change that will produce the decrease in actual emissions. A decrease that has not been logged is creditable only if the decrease is quantifiable, enforceable, and otherwise qualifies as a creditable decrease.

C. Except as provided in the conditions applicable to an emissions cap created under 17.12.195, the following changes may be made if the source provides written notice to the Department in advance of the change as provided below:

1. Replacing an item of air pollution control equipment listed in the permit with one that is not identical but that is substantially similar and has the same or better pollutant removal efficiency: seven days. The Control Officer may require verification of efficiency of the new equipment by performance tests;
2. A physical change or change in the method of operation that increases actual emissions more than 10% of the major source threshold for any conventional pollutant but does not require a permit revision: seven days;
3. Replacing an item of air pollution control equipment listed in the permit with one that is not substantially similar but that has the same or better efficiency: 30 days. The Control Officer may require verification of efficiency of the new equipment by performance tests;
4. A change that would trigger an applicable requirement that already exists in the permit: 30 days unless otherwise required by the applicable requirement;
5. A change that amounts to reconstruction of the source or an affected facility: seven days. For purposes of this subsection, reconstruction of a source or an affected facility shall be presumed if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new source or affected facility and the changes to the components have occurred over the 12 consecutive months beginning with commencement of construction; and
6. A change that will result in the emissions of a new regulated air pollutant above an applicable regulatory threshold but that does not trigger a new applicable requirement for that source category: 30 days. For purposes of this requirement, an applicable regulatory threshold for a conventional air pollutant shall be 10% of the applicable major source threshold for that pollutant.

D. For each change under subsection (C), the written notice shall be by certified mail or hand delivery and shall be received by the Control Officer the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:

1. When the proposed change will occur,
2. A description of the change,
3. Any change in emissions of regulated air pollutants, and
4. Any permit term or condition that is no longer applicable as a result of the change.

E. A source may implement any change in subsection (C) without the required notice by applying for a minor permit revision under 17.12.255 and complying with 17.12.255 (D)(2) and (G).

F. The permit shield described in 17.12.310 shall not apply to any change made under this Section, other than implementation of an alternate operating scenario under subsection (B)(1).

G. Notwithstanding any other part of this Section, the Control Officer may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, constitutes a change under 17.12.235(A).

H. If a source change is described under both subsections (B) and (C), the source shall comply with subsection (C). If a source change is described under both subsections (C) and 17.12.235(B), the source shall comply with 17.12.235(B).

I. A copy of all logs required under subsection (B) shall be filed with the Control Officer within 30 days after each anniversary of the permit issue date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.

1. Each log entry required by a change under 17-12-240 (B) shall include at least the following information:
   a. A description of the change, including:
      i. A description of any process change.
      ii. A description of any equipment change, including both old and new equipment descriptions, model numbers and serial numbers, or any other unique equipment number.
      iii. A description of any process material change.
   b. The date and time that the change occurred.
   c. The provision of 17.12.240(B) that authorizes the change to be made with logging.
   d. The date the entry was made and the first and last name of the person making the entry.
2. Logs shall be kept for five years from the date created. Logging shall be performed in indelible ink in a bound log book with sequentially numbered pages, or in any other form, including electronic format, approved by the Control Officer. (Ord. 2005- § 2, 2005)

~~17.12.240~~ 17.12.245 Administrative permit amendments.

A. No Change

B. No Change

C. No Change

D. No Change

E. Except for administrative permit amendments involving a transfer under 17.12.290, the source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. (Ord. 2005- §2, 2005; Ord. 1998-27 § 9, 1998; Ord. 1995-87 § 17, 1995; Ord. 1994-83 § 20, 1994: Ord. 1993-128 § 3 (part), 1993)

17.12.250 Annual summary permit amendments for Class II permits.

The Control Officer may amend any Class II permit annually without following 17.12.270 in order to incorporate changes reflected in logs or notices filed under 17.12.240. The amendment shall be effective to the anniversary date of the permit. The Control Officer shall make available to the public for any source:

1. A complete record of logs and notices sent to the Department under 17.12.240; and
2. Any amendments or revisions to the source's permit. (Ord.2005- §2, 2005)

~~17.12.250~~ 17.12.255 Minor permit revisions.

A. Minor permit revision procedures may be used only for those ~~permit revisions~~ changes at a Class I source that satisfy all of the following:

1. Do not violate any applicable requirement;
2. Do not involve substantive changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source specific determination of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. ~~Such~~ The terms and conditions include:
   a. A federally enforceable emissions cap ~~which~~ that the source would assume to avoid classification as a modification under any provision of Title I of the Act (Air Pollution Prevention and Control);
   b. An alternative emissions limit approved ~~pursuant to~~ under regulations promulgated under the section 112(i)(5) of the Act (Hazardous Air Pollutants).
5. Are not modifications under any provision of Title I of the Act (Air Pollution Prevention and Control)~~, or regulations promulgated pursuant to A.R.S. § 49-426.06.~~;
6. Are not changes in fuels not represented in the permit ~~.~~;

7. The increase in the source's potential to emit any regulated air pollutant is not significant as defined in section 17.04.340~~.~~;and
8. Are not required to be processed as a significant revision under 17.12.260.

B. Minor permit provision procedures shall be used for the following changes at a Class II source:
1. A change that triggers a new applicable requirement if all of the following apply:
   a. For emissions units not subject to an emissions cap, the net emissions increase is less than the significant level defined in 17.04.340;
   b. A case-by-case determination of an emission limitation or other standard is not required; and
   c. The change does not require the source to obtain a Class I permit;
2. Increasing operating hours or rates of production above the permitted level unless the increase otherwise creates a condition that requires a significant permit revision;
3. A change in fuel from fuel oil or coal, to natural gas or propane, if not authorized in the permit;
4. A change that results in emissions subject to monitoring, recordkeeping, or reporting under 17.12.180(A)(3),(4), or (5) and that cannot be measured or otherwise adequately quantified by monitoring, recordkeeping, or reporting requirements already in the permit;
5. A decrease in the emissions permitted under an emissions cap unless the decrease requires a change in the conditions required to enforce the cap or to ensure that emissions trades conducted under the cap are quantifiable and enforceable; and
6. Replacement of an item of air pollution control equipment listed in the permit with one that does not have the same or better efficiency.

~~B~~C. As approved by the control officer, minor permit revision procedures may be used for permit revisions involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that ~~such~~ the minor permit revision procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by the Administrator.

~~C~~D. An application for minor permit revision shall be on the standard application form contained in Title 18, Chapter 2, Appendix 1 of the A.A.C. and include the following:
1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. For Class I sources, and any source that is making the change immediately after it files the application, the source's suggested proposed permit;
3. Certification by a responsible official, consistent with standard permit application requirements, that the proposed revision meets the criteria for use of minor permit revision procedures and a request that ~~such~~ the procedures be used;

~~D~~E. EPA and affected State notification. For Class I permits, within 5 working days of receipt of an application for a minor permit revision, the control officer shall notify the Administrator and affected states of the requested permit revision in accordance with ~~17.12.190~~17.12.200.

~~E~~F. The control officer shall follow the following timetable for action on an application for a minor permit revision:
1. For Class I permits, the control officer shall not issue a final permit revision until after the Administrator's 45-day review period or until the Administrator has notified the control officer that the Administrator will not object to issuance of the permit revision, whichever is first, although the control officer may approve the permit revision ~~prior to~~ before that time. Within 90 days of the control officer's receipt of an application under minor permit revision procedures, or 15 days after the end of the Administrator's 45-day review period, whichever is later, the control officer shall do one or more of the following:
   a. Issue the permit revision as proposed~~.~~;
   b. Deny the permit revision application~~.~~;
   c. Determine that the proposed permit revision does not meet the minor permit revision criteria and should be reviewed under the significant revision procedures in 17.12.260~~.~~, or
   d. Revise the proposed permit revision and transmit to the Administrator the new proposed permit revision as required in ~~17.12.190~~17.12.200.
2. Within ~~90~~ 60 days of the control officer's receipt of an application for a revision of a Class II permit under this Section, the control officer shall do one or more of the following:

a. Issue the permit revision as proposed~~.~~.

b. Deny the permit revision application~~.~~.

c. Determine that the permit revision does not meet the minor permit revision criteria and should be reviewed under the significant revision procedures pursuant to 17.12.260~~.~~,or

d. Revise and issue the proposed permit revision.

~~F~~G. ~~Source's ability to make change.~~ The source may make the change proposed in its minor permit revision application immediately after it files the application. After the source makes the change allowed by the preceding sentence, and until the control officer takes any of the actions specified in subsection ~~E~~ (F) ~~of this Section~~, the source shall comply with both the applicable requirements governing the change and the proposed revised permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to revise may be enforced against it.

~~G~~H. The permit shield under 17.12.310 shall not extend to minor permit revisions.

~~H~~I. Notwithstanding any other part of this section, the control officer may require a permit to be revised under 17.12.260 for any change that, when considered together with any other changes submitted by the same source under this section or ~~17.12.230~~ 17.12.240 over the life of the permit, do not satisfy subsection ~~A of this section~~ (A) for Class I sources or subsection (B) for Class II sources.

~~I~~J. The control officer shall make available to the public monthly summaries of all applications for minor revisions. (Ord. 2005- §2, 2005 ;Ord. 1998-27 § 10, 1998; Ord. 1994-83 § 21, 1994: Ord. 1993-128 § 3 (part), 1993)

17.12.260 Significant permit revisions.

A. For Class I sources, a ~~Significant~~ significant revision ~~procedures~~ shall be used for ~~applicants~~ an application requesting a permit ~~revisions~~ revision that ~~do~~ does not qualify as a minor ~~revisions~~ permit revision or as an administrative ~~amendments~~ amendment. A significant revision that is only required because of a change described in section 17.12.255 (A) (6) or (7) shall not be considered a significant permit revision under Part 70 for the purposes of 40 CFR 64.5(a)(2). Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions shall follow significant revision procedures.

~~B. All modifications to major sources of federally listed hazardous air pollutants, and any reconstruction of a source, or a process or production unit, under section 112(g) of the Act and regulations promulgated thereunder, shall follow significant revision procedures and any rules adopted pursuant to A.R.S. 49-426.03 and 49-480.03.~~

B. A source with a Class II permit shall make the following changes only after the permit is revised following the public participation requirements of 17.12.340:

1. Establishing or revising a voluntarily accepted emission limitation or standard as described by 17.12.190 or 17.195, except a decrease in the limitation authorized by 17.12.255;
2. Making any change in fuel not authorized by the permit and that is not fuel oil or coal, to natural gas or propane;
3. A change to or addition of an emissions unit not subject to an emissions cap that will result in a net emission increase of a pollutant greater than the significance level in 17.04.340 (211);
4. A change that relaxes monitoring, recordkeeping, or reporting requirements, except when the change results from:
   a. Removing equipment that results in a permanent decrease in actual emissions, if the source keeps on-site records of the change in a log that satisfies Appendix 3 of this Chapter and if the requirements that are relaxed are present in the permit solely for the equipment that was removed; or
   b. A change in an applicable requirement.
5. A change that will cause the source to violate an existing applicable requirement including the conditions establishing an emissions cap;
6. A change that will require any of the following:
   a. A case-by-case determination of an emission limitation or other standard;
   b. A source-specific determination of ambient impacts, or a visibility or increment analysis; or
   c. A case-by-case determination of a monitoring, recordkeeping, and reporting requirement.
7. A change that requires the source to obtain a Class I permit.

~~B~~C. ~~All~~ Any modifications to major sources of federally listed hazardous air pollutants, and any reconstruction of a source, or a process or production unit, under section 112(g) of the Act and regulations promulgated thereunder, shall follow significant revision procedures and any rules adopted ~~pursuant to~~ under A.R.S. 49-426.03 and 49-480.03.

~~C. All modifications to sources subject to rules promulgated pursuant to A.R.S. 49-426.06 and 49-480.04 shall follow the revision procedures provided in those rules.~~

D. Significant permit revisions shall meet all requirements of this Article for applications, public participation, review by affected States, and review by the Administrator ~~as they~~ that apply to permit issuance and renewal.

E. Notwithstanding 17.12.160~~.E.1~~.(E)(1), when an existing source applies for a significant permit revision to revise its permit from a Class II permit to a Class I permit, it shall submit a Class I permit application for the entire source in accordance with 17.12.160~~.B~~.(B). The control officer shall issue the entire permit, and not just the portion being revised, in accordance with Class I permit ~~application,~~ content~~,~~ and issuance requirements, including requirements for public, affected state, and EPA review, contained in sections ~~17.12.190~~17.12.200 and 17.12.340.

F. The control officer shall process the majority of significant permit revision applications received each calendar year within 9 months of receipt of a complete permit application but in no case longer than 18 months. Applications for which the Control Officer undertakes accelerated processing under section 17.12.510 shall not be included in this requirement. (Ord. 2005- § 2, 2005; Ord. 1998-27 § 11, 1998; Ord. 1997-79 § 6, 1997; Ord. 1994-83 § 22, 1994: Ord. 1993-128 § 3 (part), 1993)

17.12.270 Permit reopenings; revocation and reissuance; termination.
No Change

17.12.280 Permit renewal and expiration.
No Change

17.12.290 Permit transfers.
No Change

17.12.300 Portable sources.
No Change

17.12.310 Permit shields.
No Change

17.12.320 Annual emissions inventory questionnaire.
No Change

17.12.330 Permits containing the terms and conditions of federal delayed compliance orders (DCO) or consent decrees.
No Change

17.12.340 Public participation.
No Change

17.12.345 Public notification.
No Change

17.12.350 Material permit condition.

A. For the purposes of A.R.S. 49-464(G) and 49-514(G), a "material permit condition" shall mean a condition ~~which~~ that satisfies all of the following:

1. The condition is in a permit or permit revision issued by the Control Officer or the control officer after the effective date of this section.

2. The condition is identified within the permit as a material permit condition.
3. The condition is one of the following:
   a. An enforceable emission standard imposed to avoid classification as a major modification or major source or to avoid triggering any other applicable requirement.
   b. A requirement to install, operate or maintain a maximum achievable control technology or hazardous air pollutant reasonably available control technology required pursuant to the requirements of A.R.S. § 49-426.06.
   c. A requirement for the installation or certification of a monitoring device.
   d. A requirement for the installation of air pollution control equipment.
   e. A requirement for the operation of air pollution control equipment.
   f. ~~Any~~ An opacity standard required by section 111 (Standards of Performance for New Stationary Sources) or Title I, part C or D (Air Pollution Prevention and Control) of the Act.
4. Violation of the condition is not covered by A.R.S. §49-464 ~~subsections A~~ (A) through ~~F~~ (F), or ~~H~~ (H) through ~~J~~ (J) ~~of A.R.S. 49-464~~ or A.R.S. §49-514 ~~subsections A~~ (A) through ~~F~~ (F), or ~~H~~ (H) through ~~J~~ (J) ~~of A.R.S. 49-514~~.

B. For the purposes of paragraphs ~~A.3.c, d and e~~ (A)(3) (c), (d), and (e) of this section, a permit condition shall not be material ~~only~~ where the failure to comply resulted from circumstances ~~which~~ that were outside the control of the source. As used in this section, "circumstances outside the control of the source" shall mean circumstances where the violation resulted from a sudden and unavoidable breakdown of the process or the control equipment, resulted from unavoidable conditions during a start up or shut down or resulted from upset of operations.

C. For purposes of this section, the term "emission standard" shall have the meaning ~~set forth at subsection T of~~ specified in A.R.S. §§ 49-514 (T) and 49-464 (U). (Ord. 2005- § 2, 2005, Ord. 1998-27 § 14, 1998; Ord. 1994-83 § 29, 1994: Ord. 1993-128 § 3 (part), 1993)

17.12.360 Stack height limitation.

No Change

17.12.365 Acid Rain

A. ~~The following subparts of~~ 40 CFR Part 72, 74, 75, and 76 ~~Permits Regulation~~, and all accompanying appendices, adopted as of July 1, 2004, (and no future amendments) are incorporated by reference. These standards are on file with the Office of the Secretary of State and with the Department, and shall be applied by the Department.
   ~~1. Subpart A - Acid Rain Program General Provisions.~~
   ~~2. Subpart B - Designated Representative.~~
   ~~3. Subpart C - Acid Rain Applications.~~
   ~~4. Subpart D - Acid Rain Compliance Plan and Compliance Options.~~
   ~~5. Subpart E - Acid Rain Permit Contents.~~
   ~~6. Subpart F - Federal Acid Rain Permit Issuance Procedures.~~
   ~~7. Subpart G - Acid Rain Phase II Implementation.~~
   ~~8. Subpart H - Permit Revisions.~~
   ~~9. Subpart I - Compliance Certification.~~

B. When used in 40 CFR Part 72, 74, 75, and 76 "Permitting Authority" means the Pima County Department of Environmental Quality and "Administrator" means the Administrator of the United States Environmental Protection Agency.

C. If the provisions or requirements of the regulations incorporated ~~pursuant to~~ in this section conflict with any of the remaining portions of the Title, the regulations incorporated pursuant to this section shall apply and take precedence. (Ord. 2005- § 2, 2005, Ord. 2004-97 § 3, Ord. 1997-79 § 7, 1997; Ord. 1995-87 § 19, 1995)

Article III. General Permits for Individual Sources.

No Change

Table 17.12.480 - Repealed

~~**Table 17.12.480**~~
~~**OPEN BURNING PERMIT/NON-PERMIT REQUIREMENTS**~~

~~**Types of Outdoor Fires Which Require Temporary Open Burning Permits**~~

~~1.The burning of tumbleweeds where there is no reasonable alternate method of disposal.~~
~~2.The simulation of historical or fictional events.~~
~~3. The burning of wood or vegetative material from on-site construction activities.~~
~~4. The burning of vegetative materials generated on-site, and conducted by or for residential occupants.~~
~~5. The burning of household waste generated on-site at farms or ranches of 40 acres or more, or at a residence, where no household waste collection is available, and the nearest dwelling is 500 feet away.~~

~~**Types of Outdoor Fires Which Require Extended Open Burning Permits**~~

~~1. The burning of vegetation from agricultural ditch banks, fence rows, or canal laterals, using high temperature mechanical burners, where no reasonable alternate method or removal is available.~~
~~2. The burning of Sacaton grass in remote non-urban areas for the purpose of vegetative rehabilitation.~~

~~**Types of Outdoor Fires Which Do Not Require Open Burning Permits If Set or Supervised by a Public Official in the Performance of Official Duty[1]**~~

~~1. Burning for the purpose of weed abatement.~~
~~2. Burning for the prevention of a fire hazard.~~
~~3. Burning for the training of firefighters.~~
~~4. Burning for the purpose of watershed rehabilitation or control through vegetation manipulation.~~
~~5. Burning for the purpose of disease and pest prevention.~~
~~6. Burning for the disposal of dangerous materials where there is no safe alternate method of disposal.~~
~~7. Fires which are necessary for the training of governmental officials in criminal enforcement or national defense activities.~~
~~8. Burning for the purpose of controlling an active wildfire.~~
~~9. Prescribed burning of wildland fuels that are either in a natural or modified state.~~

~~**Types of Outdoor Fires Which Do Not Require Open Burning Permit[2]**~~

~~1. The domestic cooking of food.~~
~~2. The providing of warmth for human beings.~~
~~3. Fires for recreational purposes.~~
~~4. Fires used for the branding of animals.~~
~~5. Flares used for public safety purposes during emergencies.~~
~~6. Fires for religious or patriotic purposes.~~
~~7. Orchard heaters for the purpose of frost protection in farming or nursery operations.~~
~~8. The proper disposal of flags under 4 U.S.C. 1, §8.~~

~~[1] The control officer must be informed in writing prior to the setting of the fire and the official must conduct the burning in a manner and at times approved by the control officer. (The control officer shall not specify times and conditions which would defeat the purpose of the intended burning.)~~ ~~The public official must comply with the reporting requirements of 17.12.480.D.3.f.~~

~~[2] City or town jurisdictions may require permits for these types of fires.~~

~~(Ord. 1987-175 § 13, 1987: Ord. 1979-93 (part), 1979)~~

Table 17.12.530
OPEN BURNING PERMIT FEE SCHEDULES

S.S.[1]	Permit Activity	Rate Components	Minimum Fee
A	~~Temporary Open Burning~~ Residential Burning[2]	$16.13 base, plus $3.53 per day of burning	$19.66
B	~~Extended Open Burning~~ Commercial/Agricultural Burning[3]	$26.50 base, plus $5.00 per day of burning	$31.50

[1]Sub-schedule for identification only.

[2]The term of a residential burning permit shall not exceed three (3) consecutive or non-consecutive days within a thirty-day period.

[3]The term of a commercial/agricultural burning permit shall not exceed ninety days.

(Ord. 2005- § 2, 2005; Ord. 1993-128 § 3, 1993; Ord. 1990-113 § 13, 1990: Ord. 1989-165 § 17 (part), 1989: Ord. 1979-93 (part), 1979)

NOTICE OF FINAL RULEMAKING

Pima County Air Quality Control Regulations

Pima County Code

Title 17 – Air Quality Control

Chapter 16 Emission Limiting Standards

[M05-115]

PREAMBLE

1. Sections Affected **Rulemaking Action**

Pima County Code (PCC) 17.16.130	Amend
PCC 17.16.160	Amend
PCC 17.16.165	Amend
PCC 17.16.180	Repealed
PCC 17.16.180	New
PCC 17.16.220	Repealed
PCC 17.16.280	Repealed
PCC 17.16.290	Repealed
PCC 17.16.300	Repealed
PCC 17.16.530	Amend

2. Statutory authority for the rulemaking:

Arizona Revised Statutes (A.R.S.) § 49-112 – County Regulations; standards

A.R.S. Title 49, Chapter 3, Article 3. County Air Pollution Control

A.R.S.§ 49.471.08 – Expedited Rulemaking

A.R.S. § 49.479 – Rules; hearing

3. The effective date of the rules:

May 19, 2005

4. List of all previous notices appearing in the register addressing the proposed rule or ordinance and a concise explanatory statement.

Notice of Expedited Rulemaking: Arizona Administrative Register (AAR) 11: 9, pages 925 – 950, February 25, 2005.

Notice of Rulemaking Docket Opening: 10:49, page 4852, December 3, 2004.

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Jean Parkinson
Program Coordinator

Address: Pima County DEQ
150 W. Congress
Tucson, AZ 85701

Telephone: (520) 740-3978

Fax: (520) 882-7709

E-mail: Jean.Parkinson@deq.pima.gov

6. An explanation of the rule, including the Control Officer's reasons for initiating the rule:

Section	Action	Section by Section Analysis
PCC 17.16.130	Amend	Correct section references within text
PCC 17.16.160	Amend	Correct section references within text
PCC 17.16.165	Amend	Correct section references within text
PCC 17.16.180	Repealed	No original jurisdiction
PCC 17.16.180	New	Conform to ADEQ's Rule 18-2-732
PCC 17.16.220	Repealed	No original jurisdiction
PCC 17.16.280	Repealed	No original jurisdiction
PCC 17.16.290	Repealed	No original jurisdiction
PCC 17.16.300	Repealed	No original jurisdiction
PCC 17.16.530	Amend	Conform to 40 CFR Part 63

§17.16.130 (Applicability) Summary: This rule was corrected to reflect changes to Chapter 17.12. The referenced sections were in error due to the new rules included in Chapter 17.12 to conform to Arizona Department of Environmental Quality (ADEQ) rule changes. New sections were added in Chapter 17.12 and the sectional numbering system was reorganized.

§17.16.160 (Standards of Performance for Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment) Summary: This rule was corrected to reflect changes to Chapter 17.12. The referenced sections were in error due to the new rules included in Chapter 17.12 to conform to ADEQ rule changes. New sections were added in Chapter 17.12 and the sectional numbering system was reorganized.

§17.16.165 (Standards of Performance for Fossil-Fuel Fired Industrial and Commercial Equipment) Summary: This rule was corrected to reflect changes to Chapter 17.12. The referenced sections were in error due to the new rules included in Chapter 17.12 to conform to ADEQ rule changes. New sections were added in Chapter 17.12 and the sectional numbering system was reorganized.

§17.16.180 (Standards of Performance for Portland Cement Plants) Summary: PDEQ is repealing this section because the original jurisdiction remains with ADEQ under A.R.S. §49-402.

§17.16.180 (Standards of Performance for Existing Hospital/Medical/Infections Waste Incinerators) Summary: A new section is created for §17.16.180 to conform to ADEQ's Rule 18-2-732 (5 AAR 3058, 09/10/99) and federal standards. This rule is the result of federal requirements imposed by the Clean Air Act Amendments of 1990 (CAAA). Section 129 of the CAAA directed the Environmental Protection Agency (EPA) to promulgate rules regulating various categories of waste incinerators, including hospital/medical/infectious waste incinerators (HMIWI). In the September 15, 1997, Federal Register, EPA published new source performance standards (NSPS) and emission guidelines (EG) to reduce air emissions from HMIWI (62 FR 48348). These standards and guidelines are based on the CAAA requirements, EPA research, and public comment. Specifically, EPA added subpart Ec, NSPS for new HMIWI (40 CFR 50C, et al.), and subpart Ce, EG for existing HMIWI ($0 CFR 60.30c, et al.), to 40 CFR 60. The standards and guidelines apply to units whose primary purpose is the incineration of hospital/medical/infectious waste. This rulemaking is authorized by A.R.S. §49-479, which requires the Board of Supervisors to adopt rules that are necessary and feasible to reduce the release into the atmosphere of air contaminants within the territorial limits of the county.

§17.16.220 (Standards of Performance for Petroleum Refineries) Summary: PDEQ is repealing this section, because the original jurisdiction remains with ADEQ under A.R.S. §49-402.

§17.16.280 (Standards of Performance for Primary Copper Smelters; Site Specific Requirements) Summary: PDEQ is repealing this section, because the original jurisdiction remains with ADEQ under A.R.S. §49-402.

§17.16.290 (Standards of Performance for Primary Copper Smelters; Compliance and Monitoring) Summary: PDEQ is repealing this section, because the original jurisdiction remains with ADEQ under A.R.S. §49-402.

§17.16.300 (Standards of Performance for Primary Copper Smelters; Fugitive Emissions) Summary:

PDEQ is repealing this section, because the original jurisdiction remains with ADEQ under A.R.S. §49-402.

§17.16.530 (National Emission Standards for Hazardous Air Pollutants) Summary: This section is amended by adding two new subparts from 40 CFR Part 63, as codified on July 1, 2004; 40 CFR 63, Subpart III – National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Automobiles and Light-Duty Trucks; and Subpart PPP – NESHAP for Surface Coating of Plastic Parts and Products. These incorporations by reference of the NESHAP subparts assure the continued delegation of authority from EPA to PDEQ to enforce the federal standards. Additional grammatical and typographical errors were corrected in this Section to conform to 40 CFR Part 63.

Statutory Authority: A.R.S §49-471.08 – Expedited rule or Ordinance making – provides a statutory mechanism for a declaration of an expedited process if the rulemaking is a conforming change to directly reflect federal or state rule or law.

Background: Periodically the Pima County Department of Environmental Quality updates and conforms to the Arizona Administrative Code and the Code of Federal Regulations in an effort to achieve consistency and accuracy in Air Quality Regulations for Pima County. The last conforming changes to Title 17 were in 2004.

7. Reference to any study relevant to the rule that the Control Officer reviewed and either relied or did or did not rely on in its evaluation of or justification for the rule, where the public may review each study, all data underlying each study, and any analysis of each study and other supporting material:

No studies were reviewed in reference to this rulemaking action.

8. The preliminary summary of the economic, small business, and consumer impact:

This rulemaking action imposes no additional costs on the regulated community, small businesses, political subdivisions, or members of the public. Costs to PDEQ are those that may accrue for implementation and enforcement of the new rules. Although there were some small incremental costs due to this expedited rulemaking, PDEQ does not intend to hire any additional employees to implement or enforce these rules. These revisions should not have an economic impact on businesses in Pima County, and should not impose additional costs on the regulated community, small businesses, political subdivisions, and members of the public beyond that already incurred by reason of Federal or State law. In addition, Pima County is updating rules to conform to the Arizona Administrative Code and recent rule amendments finalized by the Arizona Department of Environmental Quality and EPA. These revisions should have not have an economic impact on Pima County businesses beyond that already incurred by reason of State and/or Federal law.

9. A description of the changes between the "Notice of Expedited Rulemaking," including supplemental notices, and final rules (if applicable):

Table of Contents: Deleted strikeout font - 17.16.220, 17.16.380, 17.16.290, and 17.16.300.

Table of Contents: Changed "RESERVED" to (Reserved)

All references to the Ordinance citation for the proposed changes in the text of Chapter 17.16 were changed from"(Ord.2005- §4, 2005)" **to** (Ord. 2005- §3, 2005)

17.16.130(E)(3): Underlined 17.12.220(5)(c)(iii) to denote new addition

17.16.130(E)(4): Underlined 17.12.220(5)(c) to denote new addition

17.16.160(B): Underlined 17.12.045 to denote new addition

17.16.165(B): Underlined 17.12.045 to denote new addition

17.16.165(J)(1): Changed "17.12.180, 17.12.035, and 17.12.040," to 17.12.035, 17.12.040, and 17.12.180,

17.16.165(J)(2): Underlined, to denote a new addition, and added parentheses around section B. 2. The format for the excess emissions report shall comply with the requirements of 17.12.040(B).

17.16.180: Deleted "RESERVED" from the heading

17.16.180 (A): Changed R18-2-704 to 17.16.490 and R18-2-901 to 17.16.170

17.16.180(J)(2)(b): Changed (Ord.2005 - §3) to (Ord. 2005 - §3, 2005)

Table 1. Emission Limitations for Small, Medium, and Large HMIWI: Deleted + between rows.

Table 2. Emission Limitations for Rural HMIWI: Realigned columns and rows and deleted horizontal lines between rows in last column.

17.16.220: Changed heading from RESERVED to (Reserved) (Ord. 2005- §3, 2005)

17.16.280: Changed heading from RESERVED to (Reserved) (Ord. 2005- §3, 2005)

17.16.290: Changed heading from RESERVED to (Reserved) (Ord. 2005- §3, 2005)

17.16.300: Changed heading from REPEALED to (Reserved) (Ord. 2005- §3, 2005)

17.16.530(B)(25): Deleted bold font

17.16.530(B)(40): Deleted extra spaces between section numbers)

17.16.530(B): Numerous renumbered definitions were not properly underlined to indicate a change in numerical order in the previous AAR publication, which include: 67, 91, 92, 93, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, and 119.

17.16.530(B)(99): Underlined all text to indicate new addition

17.16.530(B)(102): Underlined Table 1 to denote new addition

17.16.530(B)(105): Underlined Tables to denote new addition

17.16.530(B)(107): Underlined Tables to denote new addition

17.16.530(B)(108): Underlined Tables to denote new addition

17.16.530(B)(109): Underlined Tables to denote new addition

17.16.530(B)(110): Underlined Tables to denote new addition

17.16.530(B)(111): Underlined Tables to denote new addition

17.16.530(B)(112): Underlined Tables to denote new addition

17.16.530(B)(113): Underlined Tables to denote new addition

17.16.530(B)(115): Underlined Tables to denote new addition

10. A summary of the comments made regarding the rule and the agency response to them:

There was one e-mail comment regarding the "Reserved" heading for 17.16.180 (Standards of Performance for Portland Cement Plants), which was corrected above by deletion.

Another e-mail comment requested clarification of the changes to 17.16.165 (Standards of Performance for Fossil-Fuel Fire Steam Generators and General Fuel Burning Equipment). The changes were reference changes to section numbers due to the renumbering of headings in Chapter 17.12.

Another e-mail questioned the effective date of the proposed rule changes, which will be 31 days after the Board of Supervisors adopts the Ordinance (May 19, 2005).

11. Any other matters prescribed by the statute that are applicable to the specific agency or to any specific rule or class of rules:

None

12. Incorporations by reference and their location in the rules:

All referenced incorporations provided in the text of the rule or ordinance are available for review at the Pima County Department of Environmental Quality. The state statutes: Arizona Revised Statutes, Title 49, Chapter 3 are available at the PDEQ office or at: http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp

The federal regulations: are available at the PDEQ office or at: http://www.ecfr.gpoaccess.gov

13. Were the rules previously made as emergency rules?

No. These rules were previously published as "Expedited," in accordance with A.R.S. § 49-471.08(A).

14. The full text of the rule follows:

Chapter 17.16 EMISSION LIMITING STANDARDS

Sections:

Article I. General Provisions

17.16.010 Local rules and standards; applicability of more than one standard.

17.16.020 Noncompliance with applicable standards.

17.16.030 Odor Limiting Standards.

Article II. Visible Emission Standards.

17.16.040 Standards and applicability (Includes NESHAP).

Article VI. New Source Performance Standards.
17.16.490 Standards of performance for new stationary sources (NSPS).
17.16.500 Standards of performance for fossil-fuel fired steam generators.
17.16.510 Standards of performance for incinerators.
17.16.520 Standards of performance for storage vessels for petroleum liquids.
Article VII. National Emission Standards for Hazardous Air Pollutants.
17.16.530 National Emissions Standards for Hazardous Air Pollutants (NESHAP).
17.16.540 (Reserved)
Article VIII. New Major Sources and Major Modifications to Existing Major Sources.
17.16.550 General.
17.16.560 Permits for sources located in nonattainment areas.
17.16.570 Offset and net air quality benefit standards.
17.16.580 Special rule for sources of VOC or oxides of nitrogen in ozone nonattainment areas classified as serious or severe.
17.16.590 Permit requirements for sources located in attainment and unclassifiable areas.
17.16.600 Air quality impact analysis and monitoring requirements.
17.16.610 Innovative control technology.
17.16.620 Air quality models.
17.16.630 Visibility protection.
17.16.640 Special rule for non-operating sources of sulfur dioxide in sulfur dioxide nonattainment areas.
Article IX. Emissions of Hazardous Air Pollutants (HAPS).
17.16.645 Effective date.
17.16.650 Definitions.
17.16.660 Federal list of hazardous air pollutants.
17.16.670 Standards of performance for hazardous air pollutants.
17.16.680 Control of federal hazardous air pollutants.
17.16.690 Case-by-case MACT determinations.
17.16.700 Alternative emission limitations.
Article X. Ozone depleting substances.
17.16.710 Sale and use of refrigerant substitutes.

Article I. General Provisions.

17.16.010 Local rules and standards; Applicability of more than one standard.

No Change

17.16.020 Noncompliance with applicable standards.

No Change

17.16.030 Odor Limiting Standards.

No Change

Article II. Visible Emission Standards.

17.16.040 Standards and applicability (Includes NESHAP).

No Change

17.16.050 Visibility limiting standard.

No Change

Article III. Emissions from Existing and New Nonpoint Sources.

17.16.055 General.
No Change

17.16.060 Fugitive dust producing activities.
No Change

17.16.070 Fugitive dust emissions standards for motor vehicle operation.
No Change

17.16.080 Vacant lots and open spaces.
No Change

17.16.090 Roads and streets.
No Change

17.16.100 Particulate materials.
No Change

17.16.110 Storage piles.
No Change

17.16.120 Mineral tailings.
No Change

Article IV. New and Existing Stationary Source Performance Standards.

17.16.130 Applicability.

A. No Change
B. No Change
C. No Change
D. No Change
E. If the control officer receives a petition under subsection (D) the control officer shall approve or deny the petition as provided below by October 15, 2004:
   1. If the petition is approved under subsection (D)(1) or (D)(2), the control officer shall include an alternative opacity limit in a proposed significant permit revision for the source under 17.12.260 and 17.12.340. The proposed alternative opacity limit shall be set at a value that has been demonstrated during, and not extrapolated from, testing, except that an alternative opacity limit under this Section shall not be greater than 40%. For multiple units that are normally operated together and whose emissions vent through a single stack, any new alternative opacity limit shall reflect the opacity level at the common stack exit, and not individual in-duct opacity levels.
   2. If the petition is approved under subsection (D)(3), the control officer shall include an alternative opacity limit in a proposed revision to the applicable implementation plan, and submit the proposed revision to EPA for review and approval. The proposed alternative opacity limit shall be set at a value that has been demonstrated during, and not extrapolated from, testing, except that the alternative opacity limit shall not be greater than 40%.
   3. If the petition is denied, the source shall either comply with the 20% opacity limit or apply for a significant permit revision to incorporate a compliance schedule under ~~17.12.210(5)(c)(iii)~~ 17.12.220 (5) (c) (iii) by April 23, 2006.
   4. A source does not have to petition for an alternative opacity limit under subsection (D) to enter into a revised compliance schedule under ~~17.12.210(5)(c).~~ 17.12.220 (5) (c).
F. The control officer, Administrator, source owner or operator, inspector or other interested party shall determine the process weight rate, as used in this Article, as follows:

1. For continuous or long run, steady-state process sources, the process weight rate is the total process weight for the entire period of continuous operation, or for a typical portion of that period, divided by the number of hours of the period, or portion of hours of that period.
2. For cyclical or batch process sources, the process weight rate is the total process weight for a period which covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during the period. (Ord. 2005- § 4, 2005; Ord. 2004-97 § 4, Ord. 1979-93 (part), 1979)

17.16.140 Compilation of mass rates and concentrations.
No Change

17.16.150 Hazardous Waste, Hazardous Waste Fuel, Used Oil, and Used Oil Fuel Burning Equipment.
No Change

17.16.160 Standards of performance for fossil-fuel fired steam generators and general fuel burning equipment.
A. No Change
B. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat content of solid fuel shall be determined in accordance with ~~17.12.040~~17.12.045. Compliance tests shall be conducted during operation at the nominal rated capacity of each unit.
C. No Change
D. No Change
E. No Change
F. No Change
G. No Change
H. No Change
I. No Change
J. The applicable reference methods given in the Appendices to 40 CFR 60 shall be used to determine compliance with the standards as prescribed in subsections C through G and I of this Section. All tests shall be run at the heat input calculated under subsection (B) of this Section. (Ord. 2005- § 4, 2005; Ord. 1994-83 § 53, 1994: Ord. 1993-128 § 4 (part), 1993)

17.16.165 Standards of performance for fossil-fuel fired industrial and commercial equipment.
A. No Change
B. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat content of solid fuel shall be determined in accordance with ~~17.12.040~~17.12.045. Compliance tests shall be conducted during operation at the nominal rated capacity of each unit. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter ~~which~~ that may be emitted.
C. No Change
D. No Change
E. No Change
F. No Change
G. No Change
H. No Change
I. The owner or operator subject to the provisions of this Section shall install, calibrate, maintain and operate a continuous monitoring system for measurement of the opacity of emissions discharged into the atmosphere from the control device.
   ~~J.~~1. For the purpose of reports required under excess emissions reporting required by 17.12.180, 17.12.035, and 17.12.040, the owner or operator shall report all six-minute periods in which the opacity of any plume or effluent exceeds 15 percent.
   2. The format for the excess emissions report shall comply with the requirements of 17.12.040.B.
~~K~~J. The test methods and procedures required by this Section are as follows:
   1. No Change

2. No Change
3. No Change
4. No Change
5. Gross calorific value shall be determined in accordance with the applicable ASTM methods: D-2015-91 (Test for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter) for solid fuels, D-240-87 (Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter) for liquid fuels, and D-1826-88 (Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter) for gaseous fuels. The rate of fuels burned during each testing period shall be determined by suitable methods and shall be confirmed by a material balance over the fossil-fuel fired system. (Ord. 2005- § 4, 2005; Ord. 2004-97 § 4, Ord. 1994-83 § 54, 1994: Ord. 1993-128 § 4 (part), 1993)

17.16.170 Incinerators.

No Change

~~**17.16.180 Standards of performance for portland cement plants.**~~

~~A. The provisions of this Section are applicable to the following affected facilities in portland cement plants: kiln, clinker cooler, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading and unloading systems.~~

~~B. No person shall cause, allow or permit the discharge of particulate matter from any identifiable process source within any existing cement plant subject to the provisions of this Section which exceeds the amounts calculated by one of the following equations:~~

~~1. For process sources having a process weight rate of 33,700 pounds per hour (16.85 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:~~

~~E=4.10P0.67~~

~~where:~~

~~E = the maximum allowable particulate emissions rate in pounds-mass per hour.~~

~~P = the process weight rate in tons-mass per hour.~~

~~2. For process sources having a process weight rate of greater than 33,700 pounds per hour (16.85 tons per hour) but no more than 250,000 pounds per hour (125 tons per hour), the maximum allowable emissions shall be determined by the following equation:~~

~~E = 17.31 P0.16~~

~~where:~~

~~"E" and "P" are defined as indicated in subdivision 1. of this subsection.~~

~~3. For kilns having a process weight rate of greater than 250,000 pounds per hour (125 tons per hour), the maximum allowable emissions shall not exceed 0.30 pounds of particulate matter per ton of process weight.~~

~~4. For clinker coolers having a process weight rate of greater than 250,000 pounds per hour (125 tons per hour), the maximum allowable emissions shall not exceed 0.10 pounds of particulate matter per ton of process weight, maximum 2-hour average.~~

~~C. No process source within any portland cement plant shall exceed 20 percent opacity.~~

~~D. No person shall cause, allow or permit discharge into the atmosphere of an amount in excess of six pounds of sulfur oxides, calculated as sulfur dioxide, per ton cement kiln feed from cement plants subject to the provisions of this Section.~~

~~E. The owner of operator of any portland cement plant subject to the provisions of this Section shall record the daily production rates and the kiln feed rates.~~

~~F. The test methods and procedures required by this Section are as follows:~~

~~1. The reference methods in 40 CFR 60, Appendix A, except as provided for in 17.12.050 shall be used to determine compliance with the standards prescribed in subsection B of this Section as follows:~~

~~a. Method 4 and 5 for the concentration of particulate matter and the associated moisture content;~~

~~b. Method 1 for sample and velocity traverses;~~

~~c. Method 2 for velocity and volumetric flow rate;~~

~~d. Method 3 for gas analysis.~~

~~2. For Method 5, the minimum sampling time and minimum sample volume for each run except when process variables or other factors justifying otherwise to the satisfaction of the control officer, shall be as follows:~~
~~a. 60 minutes and 0.85 dscm (30.0 dscf) for the kiln,~~
~~b. 60 minutes and 1.15 dscm (40.6 dscf) for the clinker cooler.~~
~~3. Total kiln feed rate, except fuels, expressed in metric tons per hour on a dry basis, shall be both:~~
~~a. Determined during each testing period by suitable methods; and~~
~~b. Confirmed by a material balance over the production system.~~
~~4. For each run, particular matter emissions, expressed in g/metric ton of kiln feed, shall be determined by dividing the emission rate in g/hr by the kiln feed rate. The emission rate shall be determined by the equation, g/hr = Qs x c, where Qs = volumetric flowrate of the total effluent in dscm/hr as determined in accordance with paragraph 1.c. of this subsection, and c = particulate concentration in g/dscm as determined in accordance with paragraph 1.a. of this subsection.~~

~~G. Pursuant to A.R.S. § 49-402(D), the provisions of subsections 17.16.010 (D) and (E) and section 17.16.150 shall be applicable to state regulated portland cement plants. (Ord. 1994-83 § 55, 1994: Ord. 1993-128 § 4 (part), 1993)~~

17.16.180 Standards of Performance for Existing Hospital/Medical/Infectious Waste Incinerators

A. This Section applies to any hospital/medical/infectious waste incinerator (HMIWI) for which construction was commenced on or before June 20, 1996. All federal regulations cited within this Section are incorporated by reference in R18-2-901. An incinerator subject to this Section is not subject to R18-2-704. The following types of incinerators are not subject to this Section:
1. An incinerator during periods when only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned, if the owner or operator of the incinerator does both of the following:
a Notifies the Control Officer of an exemption claim.
b. Keeps records on a calendar quarter basis of the periods of time when only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned.
2. Any co-fired incinerator if the owner or operator of the incinerator does all of the following:
a. Notifies the Control Officer of an exemption claim.
b. Provides an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels or wastes to be burned.
c. Keeps records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste burned, and the weight of all other fuels and wastes burned at the co-fired incinerator.
3. Any incinerator required to have a permit under Section 3005 of the Solid Waste Disposal Act.
4. Any incinerator subject to 40 CFR 60, Subparts Cb, Ea, or Eb (standards or guidelines for certain municipal waste incinerators).
5. Any pyrolysis unit, as defined in 40 CFR 60.51c.
6. Cement kilns firing hospital waste or medical/infectious waste.

B. A physical or operational change made to an existing HMIWI unit solely for the purpose of complying with emission limitations under this Section is not considered a modification and does not result in an existing HMIWI unit becoming subject to the provisions of 17.16.490 (16).

C. In addition to the definitions provided in 40 CFR 60.51c, the following definitions apply to this Section:
1. "Rural HMIWI" means any small HMIWI that is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area and that burns less than 2,000 pounds per week of hospital waste and medical/infectious waste. The 2,000 pounds per week limitation does not apply during performance tests.
2. "Standard Metropolitan Statistical Area" or "SMSA" means any area listed in Office of Management and Budget (OMB) Bulletin 93-17 entitled "Revised Statistical Definitions for Metropolitan Areas" dated June 30, 1993 which is incorporated by reference. This incorporation by reference does not include any later amendments or editions. A copy of the bulletin is on file with the Office of the Secretary of State and the Department.
3. "State Plan" means the plan that 40 CFR 60 subpart Ce requires states to develop to regulate existing HMIWI built on or before June 20, 1996.

D. Beginning September 15, 2000, an HMIWI shall operate under a Class I permit.

E. An owner or operator of an HMIWI shall comply with the following emissions limitations:
   1. The emissions limitations in Table 1 unless the HMIWI is a rural HMIWI.
   2. The emissions limitations in Table 2, if the HMIWI is a rural HMIWI.
   3. An owner or operator of an HMIWI shall not cause to be discharged into the atmosphere from the stack of that HMIWI any gases that exhibit greater than 10% opacity (6-minute block average).
   4. An owner or operator of a large existing HMIWI shall comply with the opacity requirements in 40 CFR 60.52c (c), (d), and (e).

F. An owner or operator of an HMIWI shall comply with the operator training requirements found in 40 CFR 60.53c within one year following approval of the State Plan.

G. An owner or operator of an HMIWI shall comply with the waste management requirements found in 40 CFR 60.55c.

H. An owner or operator of a rural HMIWI shall comply with the following inspection requirements:
   1. The owner or operator shall conduct or hire another party to conduct an initial equipment inspection within one year following approval of the State Plan.
   2. At a minimum, an inspection shall include the following:
      a. Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot flame sensor, as necessary.
      b. Inspect adjustment of primary and secondary chamber combustion air, and adjust as necessary.
      c. Inspect hinges and door latches, and lubricate as necessary.
      d. Inspect dampers, fans, and blowers for proper operation.
      e. Inspect HMIWI door and door gaskets for proper sealing.
      f. Inspect motors for proper operation.
      g. Inspect primary chamber refractory lining. Clean and repair or replace lining as necessary.
      h. Inspect incinerator shell for corrosion and hot spots.
      i. Inspect secondary/tertiary chamber and stack, clean as necessary.
      j. Inspect mechanical loader, including limit switches, for proper operation, if applicable.
      k. Visually inspect waste bed (grates), and repair or seal, as appropriate.
      l. For the burn cycle that follows the inspection, document that the incinerator is operating properly and make any necessary adjustments.
      m. Inspect each air pollution control device for proper operation, if applicable.
      n. Inspect waste heat boiler systems to ensure proper operation, if applicable.
      o. Inspect bypass stack components.
      p. Ensure proper calibration of thermocouples, sorbent feed systems and any other monitoring equipment.
      q. Generally observe that the equipment is maintained in good operating condition.
   3. Within 10 operating days following an equipment inspection, the owner or operator shall complete all necessary repairs unless the owner or operator obtains written approval from the Control Officer establishing a date by which all necessary repairs of the facility shall be completed.
   4. The owner or operator of any rural HMIWI shall conduct or hire another party to conduct an equipment inspection annually (no more than 12 months following the previous annual equipment inspection), as outlined in subsections (2) and (3).

I. An owner or operator of an HMIWI shall comply with the following compliance, performance testing, and monitoring requirements:
   1. Except as provided in subsection (2), an existing HMIWI shall meet the requirements for compliance and performance testing in 40 CFR 60.56c, excluding the fugitive emissions testing requirements under 40 CFR 60.56c(b)(12) and (c)(3).
   2. A rural HMIWI shall meet the following compliance and performance testing requirements:
      a. Conduct the performance testing requirements in 40 CFR 60.56c(a), (b)(1) through (b)(9), (b)(11) (Hg only), and (c)(1). The 2,000 lb/week limitation under 40 CFR 60.33e(b) does not apply during performance tests.
      b. Establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limitations.

c. Ensure that the facility does not operate above the maximum charge rate or below the minimum secondary chamber temperature measured as three-hour rolling averages (calculated each hour as the average of the previous three operating hours) at all times except during periods of startup, shutdown, and malfunction. Operating parameter limits do not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature is a violation of the established operating parameter.

d. Except as provided in subsection (I)(2)(e), operating the facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three-hour rolling average) simultaneously is a violation of the PM, CO, and dioxin/furan emission limitations.

e. The owner or operator may conduct a repeat performance test within 30 days after violation of any applicable operating parameter to demonstrate that the facility is not in violation of any applicable emission limit. Repeat performance tests conducted under this subsection shall be conducted using the identical operating parameters that indicated a violation under subsection (I)(2)(d).

3. The owner or operator shall comply with the monitoring requirements listed in 40 CFR 60.57c of subpart Ec, except as provided in subsection (I)(4).

4. A rural HMIWI shall meet the following monitoring requirements:

a. Install, calibrate (to manufacturer's specifications), maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation.

b. Install, calibrate (to manufacturer's specifications), maintain, and operate a device that automatically measures and records the date, time, and weight of each charge fed into the HMIWI.

c. Obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75% of the operating hours per day and for 90% of the operating hours per calendar quarter that the facility is incinerating hospital waste or medical/infectious waste.

J. An owner or operator of an HMIWI shall comply with the following reporting and recordkeeping requirements:

1. An owner or operator of each HMIWI shall comply with the requirements listed in 40 CFR 60.58c(b), (c), (d), (e), and (f), excluding 40 CFR 60.58c(b)(2)(ii) (fugitive emissions) and (b)(7) (siting).

2. An owner or operator of each rural HMIWI shall perform all the following:

a. Maintain records of the annual equipment inspections, any required maintenance, and any repairs not completed within 10 days after an inspection or the time-frame established by the Control Officer.

b. Submit an annual report to PDEQ, Air Quality Division, 150 W. Congress Street, Tucson, Arizona 85701. The report shall contain information recorded under subsection (2)(a) and be submitted no later than 60 days following the year in which data were collected. The owner or operator shall send subsequent reports no later than 12 calendar months following the previous report (after receiving a Class I permit, the owner or operator shall submit these reports semiannually). The facility's manager shall sign the report. (Ord.2005- §3)

Table 1. Emission Limitations for Small, Medium, and Large HMIWI

Pollutant	Units (7% oxygen, dry basis)	Emission Limitation		
		Small HMIWI	Medium HMIWI	Large HMIWI
Particulate matter	Milligrams per dry standard cubic meter (grains per dry standard cubic foot).	115 (0.05)	69 (0.03)	34 (0.015)
Carbon monoxide	Parts per million by volume	40	40†	40
Dioxin/furans	Nanograms per dry standard cubic meter total dioxin/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter toxic equivalent quantity (grains per billion dry standard cubic feet).	125 (55) or 2.3 (1.0)	125 (55) 2.3 (1.0)	125 (55) or 2.3 (1.0)
	Parts per million by volume or percent reduction.	100 or 93%	100 or 93%	100 or 93%
Hydrogen chloride	Parts per million by volume	55	55 †	55
Sulfur dioxide	Parts per million by volume	250	250	250
Nitrogen oxides	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	1.2 (0.52) or 70%	1.2 (0.52) or 70%	1.2 (0.52) or 70%
Lead				
Cadmium	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.16 (0.07) or 65%	0.16 (0.07) or 65%	0.16 (0.07) or 65%
Mercury	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.55 (0.24) or 85%	0.55 (0.24) or 85%	0.55 (0.24) or 85%

(Ord.2005- § 3)

Table 2. Emissions Limitations for Rural HMIWI

Pollutant	Units (7% oxygen, dry basis)	Emission Limitation
Particulate matter	Milligrams per dry standard cubic meter (grains per dry standard cubic foot)	197 (0.086)
Carbon monoxide	Parts per million by volume	40
Dioxin/furans	Nanograms per dry standard cubic meter total dioxin/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter toxic equivalent quantity (grains per billion dry standard cubic feet)	800 (350) or 15 (6.6)
Hydrogen chloride	Parts per million by volume	3100 (1.0)
Sulfur dioxide	Parts per million by volume	55
Nitrogen oxides	Parts per million by volume	250
Lead	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	10 (4.4)
Cadmium	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	4 (1.7)
Mercury	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	7.5 (3.3)

(Ord.2005- § 3, 2005)

17.16.190 Standards of performance for nitric acid plants.
No Change

17.16.200 Standards of performance for sulfuric acid plants.
No Change

17.16.210 Standards of performance for asphalt concrete plants.
No Change

17.16.220 ~~Standards of performance for petroleum refineries.~~ (Reserved) (Ord. 2005- §3, 2005)

~~A. The provisions of this Section are applicable to the following affected facilities in petroleum refineries: fluid catalytic cracking unit catalyst regenerators, fluid catalytic cracking unit incinerator-waste heat boilers, and fuel gas combustion devices.~~

~~B. Except as provided in subsection G of this Section, all petroleum refineries subject to this Section are also subject to the provisions of Chapter 17.16, Article VI.~~

~~C. The owner or operator of a petroleum refinery complex subject to this Section shall develop and conduct a leak monitoring program in accordance with Appendix H of the EPA Petroleum Refinery Enforcement Manual (EPA 340/1-80-008), amended as of March, 1980, which is incorporated herein by reference and on file with the Office of the Secretary of State.~~

~~D. Upon detection of a leaking component, which has a volatile organic compound concentration exceeding 10,000 ppm when tested in the manner described in 40 CFR 60, Appendix A, the owner shall both:~~

~~1. Include the leaking component on a written list of scheduled repairs within 24 hours; and~~

~~2. Repair and retest the component within 15 days.~~

~~E. Except for safety pressure relief valves, no owner or operator of a petroleum refinery shall install a valve at the end of a pipe or line containing volatile organic compounds unless the pipe or line is sealed with a second valve, a blind flange, a plug, or a cap. The sealing device may be removed only when the line is in use, as when a sample is being taken.~~

~~F. No owner or operator of a petroleum refinery shall operate a pipeline valve or pressure relief valve in gaseous volatile organic compound service unless it is marked in some manner that is clearly visible.~~

~~G. Existing petroleum refineries of a capacity of 7,000 barrels per day or less shall be exempt from the emissions monitoring requirements of 40 CFR 60.105 provided the owner or operator of such a refinery complies with all of the following:~~

~~1. All process gases or fuel gases shall be treated in an afterburner, flare or other combustion device to insure complete combustion of carbon monoxide, hydrogen sulfide, and unburned hydrocarbons.~~

~~2. Ambient concentrations of SO_2 in the vicinity of the refinery shall be calculated using a suitable model approved by the control officer and shall not exceed the Class II maximum allowable increases given in Table 17.08.150.~~

~~3. A continuous SO_2 ambient air monitor approved by the control officer shall be placed in a location selected by the control officer and shall be maintained in accordance with 17.08.080, and SO_2 concentrations shall not exceed Class II maximum allowable increases.~~

17.16.230 Standards of performance for storage vessels for petroleum liquids.
No Change

17.16.240 Standards of performance for secondary lead smelters
No Change

17.16.250 Standards of performance for secondary brass and bronze ingot production plants.
No Change

17.16.260 Standards of performance for iron and steel plants.
No Change

17.16.270 Standards of performance for sewage treatment plants.
No Change

17.16.280 ~~Standards of performance for primary copper smelters; site specific requirements.~~ (Reserved) (Ord. 2005-§3, 2005)

~~A. No owner or operator of a primary copper smelter shall cause, allow or permit the discharge of particulate matter into the atmosphere from any process in total quantities in excess of the amount calculated by one of the following equations:~~

~~1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:~~

~~$E = 3.59P^{0.62}$~~

~~where:~~

~~E = the maximum allowable particulate emissions rate in pounds-mass per hour, and~~

~~P = the process weight rate in tons-mass per hour.~~

~~2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:~~

~~$E = 17.31P^{0.16}$~~

~~where "E" and "P" are defined as indicated in subdivision 1 of this subsection.~~

~~B. Emission values shall be calculated from the applicable equations and rounded off to two decimal places.~~

~~C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter for that process.~~

~~D. The opacity of emissions subject to the provisions of this Section shall not exceed 20 percent.~~

~~E. The reference methods set forth in the Arizona Testing Manual and 40 CFR 60, Appendix A shall be used to determine compliance with the standards prescribed in this Section as follows:~~

~~1. Method A1 or Reference Method 4 and 5 for concentration of particulate matter and associated moisture content.~~

~~2. Reference Method 1 for sample and velocity traverses.~~

~~3. Reference Method 2 for volumetric flow rate.~~

~~4. Reference method 3 for gas analysis.~~

~~F. Except as provided in a consent decree or a delayed compliance order, the owner or operator of the copper smelter of Phelps Dodge Corporation, New Cornelia Branch, shall not discharge or cause the discharge of sulfur dioxide into the atmosphere from any stack required to be monitored by 17.16.290.K. in excess of the following:~~

~~a. Annual average emissions, as calculated pursuant to 17.16.290.C. through 17.16.290.J., shall not exceed 8,900 pounds per hour.~~

~~b. The number of three-hour average emissions as calculated pursuant to 17.16.290.C through 17.16.290.J. shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period:~~

~~n~~	~~E, lb/hr.~~	~~n~~	~~E, lb/hr.~~
~~0~~	~~37,000~~	~~180~~	~~19,500~~
~~1~~	~~35,000~~	~~245~~	~~18,500~~
~~2~~	~~32,500~~	~~330~~	~~17,500~~
~~4~~	~~31,000~~	~~435~~	~~17,000~~
~~7~~	~~29,000~~	~~560~~	~~16,000~~
~~12~~	~~27,500~~	~~710~~	~~15,000~~
~~20~~	~~26,000~~	~~890~~	~~14,250~~
~~32~~	~~25,000~~	~~1100~~	~~13,500~~
~~48~~	~~23,500~~	~~1340~~	~~12,500~~
~~68~~	~~22,500~~	~~1610~~	~~12,000~~
~~94~~	~~21,500~~	~~1910~~	~~11,000~~
~~130~~	~~20,500~~	~~2240~~	~~10,500~~

~~(Ord. 1993-128 § 4, 1993)~~

~~17.16.290~~ ~~Standards of performance for primary copper smelters; compliance and monitoring.~~ (Reserved) (Ord. 2005- §3, 2005)

~~A. For purposes of this section, if ADEQ delegates authority for primary copper smelters to the department, the term "director" shall mean "control officer" and "ADEQ" shall mean the "department".~~

~~B. The cumulative occurrence and emission limits specified in 17.16.280.F. shall apply to the sum total of sulfur dioxide emissions from the smelter processing units and sulfur dioxide control and removal equipment, but not including uncaptured fugitive emissions and those emissions due solely to the use of fuel for space heating or steam generation.~~

~~C. Periods of malfunction, startup, shutdown or other upset conditions shall not be excluded when determining compliance with the cumulative occurrence or annual average emission limits specified in 17.16.280.F.~~

~~D. Compliance with the cumulative occurrence and emission limits contained in 17.16.280.F. shall be determined as follows:~~

~~1. Annual average emissions shall be calculated at the end of each day by averaging the emissions for all hours measured during the compliance period ending on that day. An annual emissions average in excess of the allowable annual average emission limit will be considered a violation if either:~~

~~a. The annual average is larger than the annual average computed for the preceding day; or~~

~~b. The annual averages computed for the five preceding days all exceed the allowable annual average emission limit.~~

~~2. Three-hour emissions averages shall be calculated at the end of each clock hour by averaging the hourly emissions for the preceding three consecutive hours whenever each such hour was measured in accordance with the requirements contained in subsection K of this Section.~~

~~E. For purposes of this Section, the compliance date, unless otherwise provided in a consent decree or a delayed compliance order, shall be January 14, 1986.~~

~~F. For purposes of subsection C. of this Section, a three-hour emissions average in excess of an emission level (E) will be considered to violate the associated cumulative occurrence limit (n) listed in 17.16.280.F. if both:~~

~~1. The number of all three-hour emissions averages measured during the compliance period in excess of that emission level exceeds the cumulative occurrence limit associated with the emission level; and~~

~~2. The average was measured during the last operating day of the compliance period being reported.~~

~~G. A three-hour emissions average can only violate the cumulative occurrence limit (n) of an emission level (E) in the day containing the last hour in the average.~~

~~H. Multiple violations of a cumulative occurrence limit in the same day and violations of different cumulative limits in the same day shall constitute a single violation of the requirements of 17.16.280.~~

~~I. The violation of any cumulative occurrence limit and an annual average emission limit in the same day shall constitute only a single violation of the requirements of 17.16.280.~~

~~J. Multiple violations of a cumulative occurrence limit by different three-hour emissions averages containing any common hour shall constitute a single violation of the requirements of 17.16.280.~~

~~K. For purposes of determining compliance with subsections C through I of this Section, the compliance period shall consist of the 365 calendar days immediately preceding the end of each day of the month being reported unless that period includes less than 300 operating days. In such case the number of days preceding the last day of the compliance period shall be increased until the compliance period contains 300 operating days. Any day in which sulfur containing feed is introduced into the smelting process constitutes an operating day.~~

~~L. For purposes of determining compliance with the cumulative occurrence and emission limits contained in 17.16.280.F., the owner or operator of any smelter subject to such limits shall install, calibrate, maintain, and operate a measurement system for continuously monitoring sulfur dioxide concentrations and stack gas volumetric flow rates in each stack which could emit five percent or more of the allowable annual average sulfur dioxide emissions from the smelter.~~

~~1. Such measurement system shall also continuously monitor sulfur dioxide concentrations and stack gas volumetric flow rates in the outlet of each piece of sulfur dioxide control equipment.~~

~~2. Captured fugitive emissions shall be continuously monitored for sulfur dioxide concentrations and stack gas volumetric flow rates, and these emissions shall be included as part of total plant emissions when determining compliance with the cumulative occurrence and emission limits contained in 17.16.280.F.~~

3. If the owner or operator can demonstrate to the director that measurement of stack gas volumetric flow in the outlet of any particular piece of sulfur dioxide control equipment would yield inaccurate results or would be technologically infeasible, then the director may allow measurement of the flow rate at an alternative sampling point.
4. For purposes of this subsection, continuous monitoring means the taking and recording of at least one measurement of sulfur dioxide concentration and stack gas flow rate reading from the effluent of each affected stack, outlet or other approved measurement location in each 15-minute period. An hour of smelter emissions shall be considered to have been continuously monitored if the emissions from all monitored stacks, outlets or other approved measurement locations are measured for at least 45 minutes of any hour in accordance with the requirements of this subsection.
5. The continuous monitoring system described in this subsection shall meet all of the following requirements:
    a. No later than 18 months prior to the compliance date and at such other times as the director may specify, the stack gas volumetric flow rate measurement system installed and operated pursuant to this Section shall be demonstrated to meet the performance specifications prescribed in 40 CFR 52, Appendix E.
    b. No later than 18 months prior to the compliance date and at such other times as the director may specify, the sulfur dioxide concentration measurement system installed and operated pursuant to this Section shall be demonstrated to meet the measurement system performance specifications prescribed in 40 CFR 52, Appendix D, except that "maximum anticipated concentration" shall be substituted for "emission standard" in "Table I -- Performance Specifications."
    c. The demonstrations of measurement systems performance required by paragraphs a and b of this subdivision shall be conducted in accordance with the field test procedures prescribed by 40 CFR 52, Appendices D and E. The director shall be notified at least 30 days in advance of the start of the field tests.
    d. Location of all sampling points for monitoring sulfur dioxide concentrations and stack gas volumetric flow rates shall be approved in writing by the director prior to installation and operation of measurement instruments.
    e. The measurement system installed and used pursuant to this subsection shall be subject to the manufacturer's recommended zero adjustment and calibration procedures at least once per 24-hour operating period unless the manufacturer specifies or recommends calibration at shorter intervals, in which case specifications or recommendations shall be followed. Records of these procedures shall be made which clearly show instrument readings before and after zero adjustment and calibration.

M. Failure of the owner or operator of a smelter subject to this Section to measure at least 95 percent of the hours during which emissions occurred in any month shall constitute a violation of this Section.

N. Failure of the owner or operator of a smelter subject to this Section to measure any 12 consecutive hours of emissions in accordance with the requirements of subsection K of this Section shall constitute a violation of this Section.

O. The owner or operator of any smelter subject to this Section shall maintain on hand and ready for immediate installation sufficient spare parts or duplicate systems for the continuous monitoring equipment required by this Section to allow for the replacement within six hours of any monitoring equipment part which fails or malfunctions during operation.

P. As a means of determining total overall emissions, the owner or operator of any smelter subject to this Section shall perform material balances for sulfur in accordance with the procedures prescribed by Appendix 8 of A.A.C., Title 8, chapter 2.

Q. The owner or operator of any smelter subject to this Section shall maintain a record of all average hourly emissions measurements required to be measured by this Section. The record of such emissions shall be retained for at least two years following the date of measurement. All of the following measurement results shall be expressed as pounds per hour of sulfur dioxide and shall be summarized monthly and submitted to the director within 20 days after the end of each month:

1. For all periods described in subsection C of this Section, the annual average emissions (expressed in pounds per hour) as calculated at the end of each day of the month;
2. The total number of hourly periods during the month in which measurements were not taken and the reason for loss of measurement for each period;

3. The number of three-hour emissions averages which exceeded each of the applicable emissions levels listed in 17.16.280.F. for the compliance periods ending on each day of the month being reported;
4. The date on which a cumulative occurrence limit listed in 17.16.280.F. was exceeded if such exceedance occurred during the month being reported.

R. The owner or operator of a smelter subject to this Section shall submit a proposed compliance schedule to the director which demonstrates that the emission limits of 17.16.280.F. will be achieved at the smelter as expeditiously as practicable, but no later than the compliance date.

S. The schedule submitted pursuant to subsection R of this Section shall include increments of progress and the date for achievement of such increments. The increments of progress shall include all of the following:
1. No later than 30 months prior to the compliance date, submission to the director of a final control plan for meeting the emission limits in 17.16.280.F.;
2. No later than 28 months prior to the compliance date, letting of contracts or issuance of purchase orders for any process or control equipment necessary to accomplish the required emission control;
3. No later than 24 months prior to the compliance date, initiation of any necessary on-site construction or initiation of any necessary installation of emission control equipment or process modification;
4. No later than 24 months prior to the compliance date, submission of the fugitive emissions evaluation prescribed in 17.16.300.B. through D, including a compliance plan for installation of any additional fugitive emission control equipment necessary to assure attainment and maintenance of the applicable ambient air quality standards in the vicinity of the smelter;
5. No later than 18 months prior to the compliance date, the initiation of the demonstrations of stack gas volumetric flow rate and sulfur dioxide concentration measurement systems required by subsections L.5.a. and b.
6. No later than three months prior to the compliance date, completion of any necessary on-site construction, or installation of emission control equipment or process modification; and
7. No later than the compliance date, achievement of compliance with the emission limits in 17.16.280.F.

T. The owner or operator shall certify to ADEQ, within 15 days after the deadline for completion of each increment, whether the required increment of progress has been met.

U. At each point in the smelter facility where a means exists to bypass the sulfur removal equipment, such bypass shall be instrumented and monitored to detect and record all periods that the bypass is in operation. Each owner or operator of a copper smelter shall report to the Director, not later than the fifteenth day of each month, the information required to be recorded by this Section. Such report shall include an explanation for the necessity of the use of the bypass. (Ord. 1994-83 § 56, 1994: Ord. 1993-128 § 4 (part), 1993)

17.16.300 ~~Standards of performance for primary copper smelters; fugitive emissions.~~ (Reserved) (Ord. 2005- §3, 2005)

A. For purposes of this section:
1. If ADEQ delegates authority for primary copper smelters to the department, the term "director" shall mean "control officer" and "ADEQ" shall mean the "department"; and
2. The compliance date, unless otherwise provided in a consent decree or a delayed compliance order, shall be January 14, 1986.

B. Not later than 24 months before the compliance date the owner or operator of a smelter subject to 17.16.280, shall submit to the director the results of an evaluation of the fugitive emissions from the smelter. The evaluation results shall contain all of the following information:
1. A measurement or accurate estimate of total fugitive emissions from the smelter during typical operations, including planned start-up and shutdown. The measurement or estimate shall contain the amount of both average short-term (24 hours) and average long-term (monthly) fugitive emissions from the smelter. The evaluation plan shall be approved in advance by ADEQ and shall specify the method used to determine the fugitive emission amounts, including the conditions determined to be "typical operations" for the smelter.
2. A measurement or accurate estimate of the relative proportion, expressed as a percentage, of total fugitive emissions during typical operations, including planned start-up and shutdown, produced by any of the following smelter processes:

~~a. Roaster or dryer operation;~~
~~b. Calcine or dried concentrate transfer;~~
~~c. Reverberatory furnace operations, including feeding, slag return, matte and slag tapping;~~
~~d. Matte transfer; and~~
~~e. Converter operations.~~

~~3. The measurement technique or method of estimation used to fulfill the requirement in subdivision 2 of this subsection shall be approved in advance by ADEQ.~~

~~4. The results of at least a 6-month fugitive emission impact analysis conducted during that part of the year when fugitive emissions are expected to have the greatest ambient air quality impact. The study shall utilize sufficient measurements of fugitive emissions, meteorological conditions and ambient sulfur dioxide concentrations to associate fugitive emissions with specific measured ambient concentrations of sulfur dioxide. The study shall describe in detail the techniques used to make the required determinations. The design of the study shall be approved in advance by ADEQ.~~

~~C. On the basis of the results of the evaluation as well as other data and information contained in the records of ADEQ, the Director shall determine whether fugitive emissions from a particular smelter have the potential to cause or significantly contribute to violations of the ambient sulfur dioxide standards in the vicinity of the smelter. If the Director finds that fugitive emissions from a particular smelter have the potential to cause or significantly contribute to violations of ambient sulfur dioxide standards in the vicinity of a smelter, then the Director shall adopt rules specifying the emission limits and undertake other appropriate measures necessary to maintain ambient sulfur dioxide standards.~~

~~D. The requirements of subsection B of this Section shall not apply to a smelter subject to this Section if the owner or operator of that smelter can demonstrate to the Director both that:~~

~~1. Compliance with the applicable cumulative occurrence and emission limits listed in 17.16.280.F. will require the smelter to undergo major modifications to its physical configuration or work practices prior to the compliance date, and~~

~~2. That the modification will reduce fugitive emissions to such an extent that such emissions will not cause or significantly contribute to violations of ambient sulfur dioxide standards in the vicinity of the smelter.~~

~~E. In order to assess the sufficiency of the cumulative occurrence and emission limits contained in 17.16.280.F. to maintain the ambient air quality standards for sulfur dioxide set forth in 17.08.020, an owner or operator of a smelter subject to this Section shall continue to calibrate, maintain and operate any ambient sulfur dioxide monitoring equipment owned by the smelter owner or operator and in operation within the area of the smelter enclosed by a circle with ten-mile radius as calculated from a center point which shall be the point of the smelter's greatest sulfur dioxide emissions, for a period of at least three years after the compliance date.~~

~~1. Such monitors shall be operated and maintained in accordance with 40 CFR 50 and 58 and such other conditions as the Director deems necessary.~~

~~2. The location of ambient sulfur dioxide monitors and length of time such monitors remain at a location shall be determined by the Director. (Ord. 1993-128 § 4, 1993)~~

17.16.310 Standards of performance for coal preparation plants.
No Change

17.16.320 Standards of performance for steel plants: electric arc furnaces (EAF).
No Change

17.16.330 Standards of performance for kraft pulp mills.
No Change

17.16.340 Standards of performance for stationary rotating machinery.
No Change

17.16.350 Standards of performance for lime manufacturing plants.
No Change

17.16.360 Standards of performance for nonferrous metals industry sources.
No Change

17.16.370 Standards of performance for gravel or crushed stone processing plants.
No Change

17.16.380 Standards of performance for concrete batch plants.
No Change

17.16.390 Standards of performance for existing municipal solid waste landfills.
No Change

17.16.400 Organic solvents and other organic materials.
No Change

17.16.410 Standards of performance for cotton gins.
No Change

17.16.420 Standards of performance for ammonium sulfide manufacturing plants.
No Change

17.16.430 Standards of performance for unclassified sources.
No Change

Article V. Emissions from New and Existing Portable Sources.

17.16.440 Reserved.
No Change

17.16.450 Off-road machinery.
No Change

17.16.460 Heater-planer units.
No Change

17.16.470 Roadway and site cleaning machinery.
No Change

17.16.480 Asphalt or tar kettles.
No Change

Article VI. New Source Performance Standards.

17.16.490 Standards of performance for new stationary sources (NSPS).
No Change

17.16.500 Standards of performance for fossil-fuel fired steam generators.
No Change

17.16.510 Standards of performance for incinerators.
No Change

17.16.520 Standards of performance for storage vessels for petroleum liquids.
No Change

Article VII. National Emission Standards for Hazardous Air Pollutants.

17.16.530 National Emissions Standards for Hazardous Air Pollutants (NESHAP).

A. No Change

B. Except as provided in subsection A, the following subparts of 40 CFR Part 63, NESHAPs for Source Categories and all accompanying appendices, adopted as of July 1, 2004 and no future editions are incorporated by reference. These standards are on file with the Office of the Secretary of State and with the Department and shall be applied by the Department.

1. Subpart A - General Provisions (Section 63.1 - 63.15)
2. Subpart B - Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections 112(g) and 112(j) (Section 63.40 - 63.56)
3. Subpart C - Excluded
4. Subpart D - Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants. (Section 63.70 - 63.81)
5. Subpart E - Excluded
6. Subpart F - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (Section 63.100 - 63.107 & Tables)
7. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (Section 63.110 - 63.152 & Appendix)
8. Subpart H - National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks (Section 63.160 - 63.182 & Tables)
9. Subpart I - National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks (Section 63.190 - 63.193)
10. Subpart J – Reserved
11. Subpart K – Reserved
12. Subpart L - National Emission Standards for Coke Oven Batteries. (Section 63.300 - 63.313 & Appendix)
13. Subpart M - National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities. (Section 63.320 - 63.325)
14. Subpart N - National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. (Section 63.340 - 63.347 & Table)
15. Subpart O - Ethylene Oxide Emissions Standards for Sterilization Facilities (Section 63.360 - 63.367)
16. Subpart P - Reserved
17. Subpart Q - National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers (Section 63.400 - 63.406 & Table)
18. Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations). (Section 63.420 - 63.429 & Table)
19. Subpart S - National Emission Standards for Pulp and Paper (Section 63.440 - 63.459 & Table)
20. Subpart T - National Emission Standards for Halogenated Solvent Cleaning. (Section 63.460 - 63.470 & Appendices)
21. Subpart U - Group I Polymers and Resins (Section 63.480 - 63.506 & Tables)
22. Subpart V - Reserved
23. Subpart W - National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production. (Section 63.520 - 63.528 & Table)

24. Subpart X - National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting (Section 63.541 - 63.550)
25. **Subpart Y - Excluded**
26. Subpart Z - Reserved
27. Subpart AA – National Emission Standards for Hazardous Air Pollutants for Phosphoric Acid Manufacturing Plants (Section 63.600 - 63.610 & Appendix)
28. Subpart BB – National Emission Standards for Hazardous Air Pollutant for Phosphate Fertilizers Production Plants (Section 63.620 - 63.631 & Appendix)
29. Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (Section 63.640 - 63.679 & Appendix)
30. Subpart DD - National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations (Section 63.680 - 63.698 & Tables)
31. Subpart EE - National Emission Standards for Magnetic Tape Manufacturing Operations. (Section 63.701 - 63.708 & Table)
32. Subpart FF - Reserved
33. Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities (Section 63.741 - 63.759 & Table & Appendix)
34. Subpart HH – National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities (Section 63.760 - 63.779 & Appendix)
35. Subpart II - Excluded
36. Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations (Section 63.800 - 63.819 & Tables)
37. Subpart KK - National Emission Standards for the Printing and Publishing Industry (Section 63.820 - 63.839 & Tables)
38. Subpart LL - National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants (Section 63.840 - 63.859 & Tables & Appendix)
39. Subpart MM - Excluded
40. Subpart OO - National Emission Standards for Tanks- Level 1 (Section 63.900 - 63.907)
41. Subpart PP - National Emission Standards for Containers (Section 63.920 - 63.928)
42. Subpart QQ - National Emission Standards for Surface Impoundments (Section 63.940 - 63.948)
43. Subpart RR - National Emission Standards for Individual Drain Systems (Section 63.960 - 63.966)
44. Subpart SS - National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process (Section 63.980 - 63.999)
45. Subpart TT - National Emission Standards for Equipment Leaks -Control Level 1 (Section 63.1000 - 63.1018)
46. Subpart UU - National Emission Standards for Equipment Leaks -Control Level 2 (Section 63.1019 - 63.1039 & Table)
47. Subpart VV - National Emission Standards for Oil-Water Separators and Organic-Water Separators (Section 63.1040 - 63.1049)
48. Subpart WW - National Emission Standards for Storage Vessels (Tanks) – Control Level 2 (Section 63.1060 - 63.1066)
49. Subpart XX - Reserved
50. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Generic ~~MACT~~ Maximum Achievable Control Technology Standards (Section 63.1100 - 63.1113)
51. Subpart ZZ – Reserved
52. Subpart AAA – Reserved
53. Subpart BBB - Reserved
54. Subpart CCC - National Emission Standards for Hazardous Air Pollutants for Steel Pickling (Section 63.1156 - 63.1174 & Table)
55. Subpart DDD - National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production (Section 63.1175 - 63.1199 & Table & Appendix)

56. Subpart EEE - National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors (Section 63.1200 - 63.1213 & Table & Appendix)
57. Subpart FFF - Reserved
58. Subpart GGG - National Emission Standards for Pharmaceuticals Production (Section 63.1250 - 63.1261 & Tables)
59 Subpart HHH - National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities (Section 63.1270 - 63.1289 & Appendix)
60. Subpart III - National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production (Section 63.1290 - 63.1309 & Appendix)
61. Subpart JJJ - National Emission Standards for Hazardous Air Pollutants: Group IV Polymers and Resins (Section 63.1310 - 63.1335 & Tables)
62. Subpart KKK - Reserved
63. Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (Section 63.1340 - 63.1359 & Table)
64. Subpart MMM - National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production (Section 63.1360 - 63.1369 & Tables)
65. Subpart NNN - National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing (Section 63.1380 - 63.1399 & Table & Appendices)
66. Subpart OOO – National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/ Phenolic Resins (Section 63.1400 - 63.1419 & Tables)
67. Subpart PPP - National Emission Standards for Hazardous Air Pollutants for Polyether Polyols Production (Section 63.1420 - 63.1439 &Tables)
68. Subpart QQQ - National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting (Section 63.1440 - 63.1459 & Table & Figure)
69. Subpart RRR - National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production (Section 63.1500 - 63.1520 & Tables)
70. Subpart SSS - Reserved
71. Subpart TTT - National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting (Section 63.1541- 63.1550)
72. Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking, Catalytic Reforming, And Sulfur Plan Units (Section 63.1560 - 63.1579 & Tables)
73. Subpart VVV--National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works (Section 63.1580 - 63.1595 & Table)
74. Subpart WWW - Reserved
75. Subpart XXX - National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production (Section 63.1620 - 63.1679)
76. Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (Section 63.1930 - 63.1990 & Appendix)
77. Subpart CCCC - National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast (Section 63.2130 - 63.2192 & Appendices)
78. Subpart DDDD - Reserved
79. Subpart EEEE - National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) (Section 63.2330 - 63.2406 & Appendices)
80. Subpart FFFF--National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (Section 63.2430 - 63.2550 & Appendices)
81. Subpart GGGG - National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production (Section 63.2830 - 63.2872)
82. Subpart HHHH - National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production (Section 63.2980 - 63.3079 & Appendices)
83. Subpart IIII – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light Duty Trucks (Section 63.3080 – 63.3176 & Tables & Appendix A)

8~~3~~4. Subpart JJJJ - National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating (Section ~~63.2130 - 63.2192~~ 63.3280 – 63.3420 & Tables) ~~& Appendices~~)

8~~4~~5. Subpart KKKK--National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans (Section 63.3480 - 63.3561 & ~~Appendices~~ Tables)

8~~5~~6. Subpart MMMM--National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products (Section 63.3880 - 63.3981 &Tables & ~~Appendices~~ Appendix A)

8~~6~~7. Subpart NNNN - National Emission Standards for Hazardous Air Pollutants: Large Appliances (Section 63.4080 - 63.4181 & ~~Appendices~~ Tables)

8~~7~~8. Subpart OOOO--National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles (Section 63.4280 - 63.4371 & ~~Appendices~~ Tables)

89. Subpart PPPP – National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products (Section 63.4480 – 63.4581 & Tables & Appendix A)

~~88~~90. Subpart QQQQ - National Emission Standards for Hazardous Air Pollutants: Wood Building Products (Section 63.4680 - 63.4781 & Appendices)

~~8~~91. Subpart RRRR - National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Furniture (Section 63.4880 - 63.4981 & Appendices)

9~~0~~2. Subpart SSSS - National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil (Section 63.5080 - 63.5206 & Appendices)

9~~1~~3. Subpart TTTT - National Emission Standards for Hazardous Air Pollutants for Leather Finishing Operations (Section 63.5280 - 63.5460 & Appendices)

9~~2~~4. Subpart UUUU - National Emission Standards for Hazardous Air Pollutants for Cellulose Products Manufacturing (Section 63.5480 - 63.5610 & Appendices)

9~~3~~5. Subpart VVVV - National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing (Section 63.5680 - 63.5779 & Appendices)

9~~4~~6. Subpart WWWW - National Emission Standards for Hazardous Air Pollutants: Reinforced Plastics Composites Production (Section 63.5780 - 63.5935 & Appendices)

9~~5~~7. Subpart XXXX - National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing (Section 63.5980 - 63.6015 & Appendices)

9~~6~~8. Subpart YYYY--National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (Section 63.6080 - 63.6175 & Appendices)

9~~7~~9. Subpart ZZZZ – ~~Reserved~~ National Emission Standards for Hazardous Air Pollutants for for Stationary Reciprocating Internal Combustion Engines (Section 63.6580 – 63.6675 & Tables)

~~98~~100.Subpart AAAAA--National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants (Section 63.7080 - 63.7143 & Appendices)

~~99~~101.Subpart BBBBB - National Emission Standards for Hazardous Air Pollutants for Semiconductor Manufacturing (Section 63.7180 - 63.7195 & Appendices)

10~~0~~2. Subpart CCCCC - National Emission Standards for Hazardous Air Pollutants for Coke Oven: Pushing, Quenching and Battery Stacks (Section 63.7280 - 63.7352 & ~~Appendix~~ Table 1)

10~~1~~3. Subpart DDDDD - Reserved

10~~2~~4. Subpart EEEEE--National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries (Section 63.7680 - 63.7765 ~~& Appendix~~)

10~~3~~5. Subpart FFFFF - National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel (Section 63.7780 - 63.7852 & ~~Appendices~~ Tables)

10~~4~~6. Subpart GGGGG--National Emission Standards for Hazardous Air Pollutants: Site Remediation (Section 63.7880 - 63.7957 & ~~Appendices~~ Tables)

10~~5~~7. Subpart HHHHH--National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing (Section 63.7980 - 63.8105 & ~~Appendices~~ Tables)

10~~6~~8. Subpart IIIII--National Emission Standards for Hazardous Air Pollutants: Mercury Emissions From Mercury Cell Chlor-Alkali Plants (Section 63.8180 - 63.8266 & ~~Appendices~~ Tables)

10~~7~~9. Subpart JJJJJ - National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing (Section 63.8380 - 63.8515 & ~~Appendices~~ Tables)

10~~8~~10. Subpart KKKKK - National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing (Section 63.8530 - 63.8665 & ~~Appendices~~ Tables)

10~~9~~11. Subpart LLLLL - National Emission Standards for Hazardous Air Pollutants for Asphalt Roofing and Processing (Section 63.8680 - 63.8698 & ~~Appendices~~ Tables)

11~~0~~2. Subpart MMMMM - National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Fabrication Operation (Section 63.8780 - 63.8830 & ~~Appendices~~ Tables)

11~~1~~3. Subpart NNNNN--National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production (Section 63.8980 - 63.9075 & ~~Appendices~~ Tables)

11~~2~~4. Subpart OOOOO - Reserved

11~~3~~5. Subpart PPPPP - National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands (Section 63.9280 - 63.9375 & ~~Appendices~~ Tables)

11~~4~~6. Subpart QQQQQ - National Emission Standards for Hazardous Air Pollutants for Friction Products Manufacturing (Section 63.9480 - 63.9579 & ~~Appendix~~ Table 1)

11~~5~~7. Subpart RRRRR--National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing (Section 63.9580 - 63.9652 & ~~Appendices~~ Tables)

11~~6~~8. Subpart SSSSS - National Emission Standards for Hazardous Air Pollutants for Refractory Products Manufacturing (Section 63.9780 - 63.9824 & ~~Appendices~~ Tables)

11~~7~~9. Subpart TTTTT--National Emissions Standards for Hazardous Air Pollutants for Primary Magnesium Refining (Section 63.9880 - 63.9942 & Appendices & Tables)

C. When used in 40 CFR Part 61 or part 63, "Administrator" means the control officer except that the control officer shall not be authorized to approve alternate or equivalent test methods or alternate standards/work practices.

D. From the general standards identified in subsection A of this section delete 40 CFR 61.04. All requests, reports, applications, submittals and other communications to the Control Officer pursuant to this article shall be submitted to the Pima County Department of Environmental Quality, 130 W. Congress, Tucson, AZ 85701.

E. The control officer shall not be delegated authority to deal with equivalency determinations that are nontransferable through section 112(e)(3) of the Act. (Ord. 2005 - § 4, 2005; Ord. 2004-97 § 4; Ord. 1998-27 § 15, 1998; Ord. 1997-79 § 10, 1997; Ord. 1995-87 § 49. 1995; Ord. 1994-83 § 60, 1994: Ord. 1993-128 § 4 (part), 1993; Ord. 1991-136 § 14, 1991: Ord. 1988-117 § 1, 1988: Ord 1986-227 § 1 (part), 1986: Ord. 1985-126 (part), 1985; Ord. 1983-196 (part), 1983)

17.16.540 (Reserved) (Ord. 1995-87 § 50. 1995; Ord. 1994-83 § 61, 1994: Ord. 1993-128 § 4 (part), 1993)

No Change

Article VIII. New Major Sources and Major Modifications to Existing Major Sources.

No Change

Article IX. Emissions of Hazardous Air Pollutants (HAPS).

No Change

Article X. Ozone depleting substances.

No Change

County Notices Pursuant to A.R.S. § 49-112

NOTICE OF FINAL RULEMAKING
Pima County Air Quality Control Regulations

Pima County Code

Title 17 – Air Quality Control

Chapter 28 Violations and Conditional Orders

[M05-116]

PREAMBLE

1. Sections Affected **Rulemaking Action**

Pima County Code (PCC) 17.28.065 Repeal

2. Statutory authority for the rulemaking:

Arizona Revised Statutes (A.R.S.) § 49-112 – County Regulations; standards

A.R.S. Title 49, Chapter 3, Article 3. County Air Pollution Control

A.R.S.§ 49.471.08 – Expedited Rulemaking

A.R.S. § 49.479 – Rules; hearing

3. The effective date of the rule:

May 19, 2005

4. List of all previous notices appearing in the register addressing the proposed rule or ordinance and a concise explanatory statement.

Notice of Expedited Rulemaking: Arizona Administrative Register (AAR) 11: 9, pages 950-953, February 25, 2005.

Notice of Rulemaking Docket Opening: AAR 10:49, page 4852, December 3, 2004.

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name:	Jean Parkinson Program Coordinator
Address:	Pima County DEQ 150 W. Congress Tucson, AZ 85701
Telephone:	(520) 740-3978
Fax:	(520) 882-7709
E-mail:	Jean.Parkinson@deq.pima.gov

6. An explanation of the rule, including the Control Officer's reasons for initiating the rule:

Section	Action	Section by Section Analysis
PCC 17.28.065	Repealed	Section moved to Chapter 17.12

§17.28.065 (Excess Emissions) Summary: This rule (ADEQ Rule 18-2-310 – 310.01) was adopted by the Pima County Board of Supervisors on October 19, 2004, by reference to the Arizona Administrative Code R18-2-310 and R18-2.310.01 as of February 15, 2001. It is being repealed during this rulemaking from Chapter 17.28, and included in its entirety in Chapter 17.12.

Statutory Authority: A.R.S §49-471.08 – Expedited rule or Ordinance making – provides a statutory mechanism for a declaration of an expedited process if the rulemaking is a conforming change to directly reflect federal or state rule or law.

Background: Periodically the Pima County Department of Environmental Quality updates and conforms to the Arizona Administrative Code and the Code of Federal Regulations in an effort to achieve consistency and accuracy in Air Quality Regulations for Pima County. The last conforming changes to Title 17 were in 2004.

7. Reference to any study relevant to the rule that the Control Officer reviewed and either relied or did or did not rely on in its evaluation of or justification for the rule, where the public may review each study, all data underlying each study, and any analysis of each study and other supporting material:

No studies were reviewed in reference to this rulemaking action.

8. The preliminary summary of the economic, small business, and consumer impact:

This rulemaking action imposes no additional costs on the regulated community, small businesses, political subdivisions, or members of the public. Costs to PDEQ are those that may accrue for implementation and enforcement of the new rules. Although there were some small incremental costs due to this expedited rulemaking, PDEQ does not intend to hire any additional employees to implement or enforce these rules. These revisions should not have an economic impact on businesses in Pima County, and should not impose additional costs on the regulated community, small businesses, political subdivisions, and members of the public beyond that already incurred by reason of Federal or State law. In addition, Pima County is updating rules to conform to the Arizona Administrative Code and recent rule amendments finalized by the Arizona Department of Environmental Quality and EPA. These revisions should have not have an economic impact on Pima County businesses beyond that already incurred by reason of State and/or Federal law.

9. A description of the changes between the "Notice of Expedited Rulemaking," including supplemental notices, and final rules (if applicable):

Table of Contents: ~~**17.28.065 Excess Emissions – Repealed**~~ changed to **17.28.065 Excess Emissions – (Reserved)**

Article I. Violations: **17.28.065 ~~Excess Emissions~~ RESERVED** changed to **17.28.065 ~~Excess Emissions~~ (Reserved) (Ord. 2005- §4, 2005)**

13. Any other matters prescribed by the statutes that are applicable to the specific agency or to any specific rule or class of rules:

None

14. Incorporations by reference and their location in the rules:

All referenced incorporations provided in the text of the rule or ordinance are available for review at the Pima County Department of Environmental Quality. The state statutes: Arizona Revised Statutes, Title 49, Chapter 3 are available at the PDEQ office or at: http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp

The federal regulations: are available at the PDEQ office or at: http://www.ecfr.gpoaccess.gov

15. The proposed effective date for the rule or ordinance.

The contents of this rulemaking will go into effect thirty days after Board adoption. The rule or ordinance will be scheduled for a public hearing/oral proceeding before the Board on:

Time: **April 19, 2005 at or after 09:00 a.m.**

Place: Pima County Board of Supervisors Public Hearing Room
130 West Congress Street, First Floor
Tucson, Arizona 85701

16. The full text of the rule follows:

Chapter 17.28 Violations and Conditional Orders

Sections:

Article I. Violations.

17.28.010 Violations and order of abatement – No Change

17.28.020 Production of Records – No Change

17.28.030 Injunctive relief – No Change

17.28.040 Precedence of actions – No Change

17.28.050 Preservation of rights – No Change

17.28.065 ~~Excess Emissions~~ – (Reserved)

17.28.070 Civil penalties. – No Change

17.28.080 Criminal penalties - No Change

17.28.090 Hearings on orders of abatement - No Change

Article II. Conditional Orders – No Change

17.28.100 Conditional orders.

Article III. Circumvention – No Change

17.28.110 Evasion of basic requirements.

Article I. Violations.

17.28.010 Violations and order of abatement.

No Change

17.28.020 Production of records.
No Change

17.28.030 Injunctive relief.
No Change

17.28.040 Precedence of actions.
No Change

17.28.050 Preservation of rights.
No change

17.28.065 ~~Excess Emissions.~~ (Reserved) (Ord. 2005- §4, 2005)
~~A.A.C. R18-2-310 and R18-2-310.01 as of February 15, 2001 are hereby adopted in its entirety and are incorporated herein by this reference, except that all references to the "Director" shall be to the "Control Officer". (Ord. 2004-97 § 4, Ord. 1997-79 § 14, 1997)~~